

WO 00/56891

PCT/US00/07817

PF-0681 PCT

## Sequence Listing

&lt;110&gt; INCYTE PHARMACEUTICALS, INC.

YUE, Henry

LAL, Preeti

TANG, Y. Tom

HILLMAN, Jennifer L.

REDDY, Roopa

BANDMAN, Olga

BAUGHN, Mariah R.

Lu, Dyung Aina L.

AZIMZAI, Yalda

YANG, Junming

&lt;120&gt; HUMAN TRANSMEMBRANE PROTEINS

&lt;130&gt; PF-0681 PCT

&lt;140&gt; To Be Assigned

&lt;141&gt; Herewith

&lt;150&gt; 60/125,537; 60 139,565

&lt;151&gt; 1999-03-22; 1999-06-16

&lt;160&gt; 58

&lt;170&gt; PERL Program

&lt;210&gt; 1

&lt;211&gt; 417

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; misc\_feature

&lt;223&gt; Incyte ID No: 1316927CD1

&lt;400&gt; 1

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Met | Trp | Lys | Gly | Leu | Val | Lys | Arg | Asn | Ala | Ser | Val | Glu | Thr | Val |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |
| Asp | Asn | Lys | Thr | Ser | Glu | Asp | Val | Thr | Met | Ala | Ala | Ala | Ser | Pro |
|     |     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |
| Val | Thr | Leu | Thr | Lys | Gly | Thr | Ser | Ala | Ala | His | Leu | Asn | Ser | Met |
|     |     |     |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |
| Glu | Val | Thr | Thr | Glu | Asp | Thr | Ser | Arg | Thr | Asp | Val | Ser | Glu | Pro |
|     |     |     |     | 50  |     |     |     |     | 55  |     |     |     |     | 60  |
| Ala | Thr | Ser | Gly | Gly | Ala | Ala | Asp | Gly | Val | Thr | Ser | Ile | Ala | Pro |
|     |     |     |     | 65  |     |     |     |     | 70  |     |     |     |     | 75  |
| Thr | Ala | Val | Ala | Ser | Ser | Thr | Thr | Ala | Ala | Ser | Ile | Thr | Thr | Ala |
|     |     |     |     | 80  |     |     |     |     | 85  |     |     |     |     | 90  |
| Ala | Ser | Ser | Met | Thr | Val | Ala | Ser | Ser | Ala | Pro | Thr | Thr | Ala | Ala |
|     |     |     |     | 95  |     |     |     |     | 100 |     |     |     |     | 105 |
| Ser | Ser | Thr | Thr | Val | Ala | Ser | Ile | Ala | Pro | Thr | Thr | Ala | Ala | Ser |
|     |     |     |     | 110 |     |     |     |     | 115 |     |     |     |     | 120 |
| Ser | Met | Thr | Ala | Ala | Ser | Ser | Thr | Pro | Met | Thr | Leu | Ala | Leu | Pro |
|     |     |     |     | 125 |     |     |     |     | 130 |     |     |     |     | 135 |
| Ala | Pro | Thr | Ser | Thr | Ser | Thr | Gly | Arg | Thr | Pro | Ser | Thr | Thr | Ala |
|     |     |     |     | 140 |     |     |     |     | 145 |     |     |     |     | 150 |
| Thr | Gly | His | Pro | Ser | Leu | Ser | Thr | Ala | Leu | Ala | Gln | Val | Pro | Lys |
|     |     |     |     | 155 |     |     |     |     | 160 |     |     |     |     | 165 |

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|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Ser | Ser | Ala | Leu | Pro | Arg | Thr | Ala | Thr | Leu | Ala | Thr | Leu | Ala | Thr | 170 | 175 | 180 |
| Arg | Ala | Gln | Thr | Val | Ala | Thr | Thr | Ala | Asn | Thr | Ser | Ser | Pro | Met | 185 | 190 | 195 |
| Ser | Thr | Arg | Pro | Ser | Pro | Ser | Lys | His | Met | Pro | Ser | Asp | Thr | Ala | 200 | 205 | 210 |
| Ala | Ser | Pro | Val | Pro | Pro | Met | Arg | Pro | Gln | Ala | Gln | Gly | Pro | Ile | 215 | 220 | 225 |
| Ser | Gln | Val | Ser | Val | Asp | Gln | Pro | Val | Val | Asn | Thr | Thr | Asn | Lys | 230 | 235 | 240 |
| Ser | Thr | Pro | Met | Pro | Ser | Asn | Thr | Thr | Pro | Glu | Pro | Ala | Pro | Thr | 245 | 250 | 255 |
| Pro | Thr | Val | Val | Thr | Thr | Thr | Lys | Ala | Gln | Ala | Arg | Glu | Pro | Thr | 260 | 265 | 270 |
| Ala | Ser | Pro | Val | Pro | Val | Pro | His | Thr | Ser | Pro | Ile | Pro | Glu | Met | 275 | 280 | 285 |
| Glu | Ala | Met | Ser | Pro | Thr | Thr | Gln | Pro | Ser | Pro | Met | Pro | Tyr | Thr | 290 | 295 | 300 |
| Gln | Arg | Ala | Ala | Gly | Pro | Gly | Thr | Ser | Gln | Ala | Pro | Glu | Gln | Val | 305 | 310 | 315 |
| Glu | Thr | Glu | Ala | Thr | Pro | Gly | Thr | Asp | Ser | Thr | Gly | Pro | Thr | Pro | 320 | 325 | 330 |
| Arg | Ser | Ser | Gly | Gly | Thr | Lys | Met | Pro | Ala | Thr | Asp | Ser | Cys | Gln | 335 | 340 | 345 |
| Pro | Ser | Thr | Gln | Gly | Gln | Tyr | Met | Val | Val | Thr | Thr | Glu | Pro | Leu | 350 | 355 | 360 |
| Thr | Gln | Ala | Val | Val | Asp | Lys | Thr | Leu | Leu | Leu | Val | Val | Leu | Leu | 365 | 370 | 375 |
| Leu | Gly | Val | Thr | Leu | Phe | Ile | Thr | Val | Leu | Val | Leu | Phe | Ala | Leu | 380 | 385 | 390 |
| Gln | Ala | Tyr | Glu | Ser | Tyr | Lys | Lys | Lys | Asp | Tyr | Thr | Gln | Val | Asp | 395 | 400 | 405 |
| Tyr | Leu | Ile | Asn | Gly | Met | Tyr | Ala | Asp | Ser | Glu | Met |     |     |     | 410 | 415 |     |

&lt;210&gt; 2

&lt;211&gt; 316

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; misc\_feature

&lt;223&gt; Incyte ID No: 1354891CD1

&lt;400&gt; 2

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Met | Pro | Lys | Asn | Phe | Trp | Ala | Gly | Val | Gly | Ile | Val | Cys | Arg | Phe | 1   | 5   | 10  | 15  |
| Arg | Glu | Gln | Asp | Ser | Phe | Pro | Pro | Ala | Ser | Ala | Ser | Cys | Pro | Ala | 20  | 25  | 30  | 35  |
| Leu | Leu | Ala | Leu | Ser | Pro | Thr | Leu | Pro | Ser | Pro | Val | Phe | Leu | Phe | 40  | 45  | 50  | 55  |
| Gln | Val | Pro | Ala | Ile | Glu | Glu | Asn | Leu | Leu | Asp | Asp | Lys | His | Leu | 60  | 65  | 70  | 75  |
| Leu | Lys | Pro | Trp | Asp | Ala | Lys | Lys | Leu | Ser | Ser | Ser | Ser | Arg |     | 80  | 85  | 90  | 95  |
| Pro | Arg | Ser | Cys | Glu | Val | Pro | Gly | Ile | Asn | Ile | Phe | Pro | Ser | Pro | 100 | 105 | 110 | 115 |
| Asp | Gln | Pro | Ala | Asn | Val | Pro | Val | Leu | Pro | Pro | Ala | Met | Asn | Thr | 120 | 125 | 130 | 135 |
| Gly | Gly | Ser | Leu | Pro | Asp | Leu | Thr | Asn | Leu | His | Phe | Pro | Pro | Pro | 140 | 145 | 150 | 155 |
| Leu | Pro | Thr | Pro | Leu | Asp | Pro | Glu | Glu | Thr | Ala | Tyr | Pro | Ser | Leu | 160 | 165 | 170 | 175 |

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|                 |                     |                     |     |  |     |
|-----------------|---------------------|---------------------|-----|--|-----|
|                 | 125                 |                     | 130 |  | 135 |
| Ser Gly Gly Asn | Thr Ser Asn Leu     | Thr His Thr Met Thr | His |  |     |
| 140             | 145                 | 150                 |     |  |     |
| Leu Gly Ile Ser | Arg Gly Met Gly Leu | Gly Pro Gly Tyr Asp | Ala |  |     |
| 155             | 160                 | 165                 |     |  |     |
| Pro Gly Leu His | Ser Pro Leu Ser His | Pro Ser Leu Gln Ser | Ser |  |     |
| 170             | 175                 | 180                 |     |  |     |
| Leu Ser Asn Pro | Asn Leu Gln Ala Ser | Leu Ser Ser Pro Gln | Pro |  |     |
| 185             | 190                 | 195                 |     |  |     |
| Gln Leu Gln Gly | Ser His Ser His Pro | Ser Leu Pro Ala Ser | Ser |  |     |
| 200             | 205                 | 210                 |     |  |     |
| Leu Ala Arg His | Val Leu Pro Thr Thr | Ser Leu Gly His Pro | Ser |  |     |
| 215             | 220                 | 225                 |     |  |     |
| Leu Ser Ala Pro | Ala Leu Ser Ser Ser | Ser Ser Ser Ser Ser | Thr |  |     |
| 230             | 235                 | 240                 |     |  |     |
| Ser Ser Pro Val | Leu Gly Ala Pro Ser | Tyr Pro Ala Ser Thr | Pro |  |     |
| 245             | 250                 | 255                 |     |  |     |
| Gly Ala Ser Pro | His His Arg Arg Val | Pro Leu Ser Pro Leu | Ser |  |     |
| 260             | 265                 | 270                 |     |  |     |
| Leu Leu Ala Gly | Pro Ala Asp Ala Arg | Arg Ser Gln Gln Gln | Leu |  |     |
| 275             | 280                 | 285                 |     |  |     |
| Pro Lys Gln Phe | Ser Pro Thr Met Ser | Pro Thr Leu Ser Ser | Ile |  |     |
| 290             | 295                 | 300                 |     |  |     |
| Thr Gln Gly Val | Pro Trp Ile Pro Val | Asn Cys Pro Leu Thr | Ser |  |     |
| 305             | 310                 | 315                 |     |  |     |

Gly

&lt;210&gt; 3

&lt;211&gt; 273

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; misc\_feature

&lt;223&gt; Incyte ID No: 1415487CD1

&lt;400&gt; 3

|                     |                     |                     |    |
|---------------------|---------------------|---------------------|----|
| Met Ile Leu Ser Ser | Tyr Phe Ile Asn Phe | Ile Tyr Leu Ala Lys |    |
| 1                   | 5                   | 10                  | 15 |
| Ser Thr Lys Lys Thr | Met Leu Thr Leu Thr | Leu Val Cys Ala Ile |    |
| 20                  | 25                  | 30                  |    |
| Thr Phe Leu Leu Val | Cys Ser Gly Thr Phe | Phe Pro Tyr Ser Ser |    |
| 35                  | 40                  | 45                  |    |
| Asn Pro Ala Asn Pro | Lys Pro Lys Arg Val | Phe Leu Gln His Met |    |
| 50                  | 55                  | 60                  |    |
| Thr Arg Thr Phe His | Asp Leu Glu Gly Asn | Ala Val Lys Arg Asp |    |
| 65                  | 70                  | 75                  |    |
| Ser Gly Ile Trp Ile | Asn Gly Phe Asp Tyr | Thr Gly Ile Ser His |    |
| 80                  | 85                  | 90                  |    |
| Ile Thr Pro His Ile | Pro Glu Ile Asn Asp | Ser Ile Arg Ala His |    |
| 95                  | 100                 | 105                 |    |
| Cys Glu Glu Asn Ala | Pro Leu Cys Gly Phe | Pro Trp Tyr Leu Pro |    |
| 110                 | 115                 | 120                 |    |
| Val His Phe Leu Ile | Arg Lys Asn Trp Tyr | Leu Pro Ala Pro Glu |    |
| 125                 | 130                 | 135                 |    |
| Val Ser Pro Arg Asn | Pro Pro His Phe Arg | Leu Ile Ser Lys Glu |    |
| 140                 | 145                 | 150                 |    |
| Gln Thr Pro Trp Asp | Ser Ile Lys Leu Thr | Phe Glu Ala Thr Gly |    |
| 155                 | 160                 | 165                 |    |
| Pro Ser His Met Ser | Phe Tyr Val Arg Ala | His Lys Gly Ser Thr |    |
| 170                 | 175                 | 180                 |    |

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|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Leu | Ser | Gln | Trp | Ser | Leu | Gly | Asn | Gly | Thr | Pro | Val | Thr | Ser | Lys |
|     |     |     |     | 185 |     |     |     |     | 190 |     |     |     |     | 195 |
| Gly | Gly | Asp | Tyr | Phe | Val | Phe | Tyr | Ser | His | Gly | Leu | Gln | Ala | Ser |
|     |     |     |     | 200 |     |     |     |     | 205 |     |     |     |     | 210 |
| Ala | Trp | Gln | Phe | Trp | Ile | Glu | Val | Gln | Val | Ser | Glu | Glu | His | Pro |
|     |     |     |     | 215 |     |     |     |     | 220 |     |     |     |     | 225 |
| Glu | Gly | Met | Val | Thr | Val | Ala | Ile | Ala | Ala | His | Tyr | Leu | Ser | Gly |
|     |     |     |     | 230 |     |     |     |     | 235 |     |     |     |     | 240 |
| Glu | Asp | Lys | Arg | Ser | Pro | Gln | Leu | Asp | Ala | Leu | Lys | Glu | Lys | Phe |
|     |     |     |     | 245 |     |     |     |     | 250 |     |     |     |     | 255 |
| Pro | Asp | Trp | Thr | Phe | Pro | Ser | Ala | Trp | Val | Cys | Thr | Tyr | Asp | Leu |
|     |     |     |     | 260 |     |     |     |     | 265 |     |     |     |     | 270 |
| Phe | Val | Phe |     |     |     |     |     |     |     |     |     |     |     |     |

&lt;210&gt; 4

&lt;211&gt; 222

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; misc\_feature

&lt;223&gt; Incyte ID No: 1693184CD1

&lt;400&gt; 4

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Met | Cys | Leu | Arg | Leu | Gly | Gly | Leu | Ser | Val | Gly | Asp | Phe | Arg | Lys |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |
| Val | Leu | Met | Lys | Thr | Gly | Leu | Val | Leu | Val | Val | Leu | Gly | His | Val |
|     |     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |
| Ser | Phe | Ile | Thr | Ala | Ala | Leu | Phe | His | Gly | Thr | Val | Leu | Arg | Tyr |
|     |     |     |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |
| Val | Gly | Thr | Pro | Gln | Asp | Ala | Val | Ala | Leu | Gln | Tyr | Cys | Val | Val |
|     |     |     |     | 50  |     |     |     |     | 55  |     |     |     |     | 60  |
| Asn | Ile | Leu | Ser | Val | Thr | Ser | Ala | Ile | Val | Val | Ile | Thr | Ser | Gly |
|     |     |     |     | 65  |     |     |     |     | 70  |     |     |     |     | 75  |
| Ile | Ala | Ala | Ile | Val | Leu | Ser | Arg | Tyr | Leu | Pro | Ser | Thr | Pro | Leu |
|     |     |     |     | 80  |     |     |     |     | 85  |     |     |     |     | 90  |
| Arg | Trp | Thr | Val | Phe | Ser | Ser | Ser | Val | Ala | Cys | Ala | Leu | Leu | Ser |
|     |     |     |     | 95  |     |     |     |     | 100 |     |     |     |     | 105 |
| Leu | Thr | Cys | Ala | Leu | Gly | Leu | Leu | Ala | Ser | Ile | Ala | Met | Thr | Phe |
|     |     |     |     | 110 |     |     |     |     | 115 |     |     |     |     | 120 |
| Ala | Thr | Gln | Gly | Lys | Ala | Leu | Leu | Ala | Ala | Cys | Thr | Phe | Gly | Ser |
|     |     |     |     | 125 |     |     |     |     | 130 |     |     |     |     | 135 |
| Ser | Glu | Leu | Leu | Ala | Leu | Ala | Pro | Asp | Cys | Pro | Phe | Asp | Pro | Thr |
|     |     |     |     | 140 |     |     |     |     | 145 |     |     |     |     | 150 |
| Arg | Ile | Tyr | Ser | Ser | Ser | Leu | Cys | Leu | Trp | Gly | Ile | Ala | Leu | Val |
|     |     |     |     | 155 |     |     |     |     | 160 |     |     |     |     | 165 |
| Leu | Cys | Val | Ala | Glu | Asn | Val | Phe | Ala | Val | Arg | Cys | Ala | Gln | Leu |
|     |     |     |     | 170 |     |     |     |     | 175 |     |     |     |     | 180 |
| Thr | His | Gln | Leu | Leu | Glu | Leu | Arg | Pro | Trp | Trp | Gly | Lys | Ser | Ser |
|     |     |     |     | 185 |     |     |     |     | 190 |     |     |     |     | 195 |
| His | His | Met | Met | Arg | Glu | Asn | Pro | Glu | Leu | Val | Glu | Gly | Arg | Asp |
|     |     |     |     | 200 |     |     |     |     | 205 |     |     |     |     | 210 |
| Leu | Leu | Ser | Cys | Thr | Ser | Ser | Glu | Pro | Leu | Thr | Leu |     |     |     |
|     |     |     |     | 215 |     |     |     |     | 220 |     |     |     |     |     |

&lt;210&gt; 5

&lt;211&gt; 329

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; misc\_feature

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PF-0681 PCT

&lt;223&gt; Incyte ID No: 1695049CD1

&lt;400&gt; 5

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Met | Pro | Gly | Lys | His | Gln | His | Phe | Gln | Glu | Pro | Glu | Val | Gly | Cys |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |
| Cys | Gly | Lys | Tyr | Phe | Leu | Phe | Gly | Phe | Asn | Ile | Val | Phe | Trp | Val |
|     |     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |
| Leu | Gly | Ala | Leu | Phe | Leu | Ala | Ile | Gly | Leu | Trp | Ala | Trp | Gly | Glu |
|     |     |     |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |
| Lys | Gly | Val | Leu | Ser | Asn | Ile | Ser | Ala | Leu | Thr | Asp | Leu | Gly | Gly |
|     |     |     |     | 50  |     |     |     |     | 55  |     |     |     |     | 60  |
| Leu | Asp | Pro | Val | Trp | Leu | Phe | Val | Val | Val | Gly | Gly | Val | Met | Ser |
|     |     |     |     | 65  |     |     |     |     | 70  |     |     |     |     | 75  |
| Val | Leu | Gly | Phe | Ala | Gly | Cys | Ile | Gly | Ala | Leu | Arg | Glu | Asn | Thr |
|     |     |     |     | 80  |     |     |     |     | 85  |     |     |     |     | 90  |
| Phe | Leu | Leu | Lys | Phe | Phe | Ser | Val | Phe | Leu | Gly | Leu | Ile | Phe | Phe |
|     |     |     |     | 95  |     |     |     |     | 100 |     |     |     |     | 105 |
| Leu | Glu | Leu | Ala | Thr | Gly | Ile | Leu | Ala | Phe | Val | Phe | Lys | Asp | Trp |
|     |     |     |     | 110 |     |     |     |     | 115 |     |     |     |     | 120 |
| Ile | Arg | Asp | Gln | Leu | Asn | Leu | Phe | Ile | Asn | Asn | Asn | Val | Lys | Ala |
|     |     |     |     | 125 |     |     |     |     | 130 |     |     |     |     | 135 |
| Tyr | Arg | Asp | Asp | Ile | Asp | Leu | Gln | Asn | Leu | Ile | Asp | Phe | Ala | Gln |
|     |     |     |     | 140 |     |     |     |     | 145 |     |     |     |     | 150 |
| Glu | Tyr | Trp | Ser | Cys | Cys | Gly | Ala | Arg | Gly | Pro | Asn | Asp | Trp | Asn |
|     |     |     |     | 155 |     |     |     |     | 160 |     |     |     |     | 165 |
| Leu | Asn | Ile | Tyr | Phe | Asn | Cys | Thr | Asp | Leu | Asn | Pro | Ser | Arg | Glu |
|     |     |     |     | 170 |     |     |     |     | 175 |     |     |     |     | 180 |
| Arg | Cys | Gly | Val | Pro | Phe | Ser | Cys | Cys | Val | Arg | Asp | Pro | Ala | Glu |
|     |     |     |     | 185 |     |     |     |     | 190 |     |     |     |     | 195 |
| Asp | Val | Leu | Asn | Thr | Gln | Cys | Gly | Tyr | Asp | Val | Arg | Leu | Lys | Leu |
|     |     |     |     | 200 |     |     |     |     | 205 |     |     |     |     | 210 |
| Glu | Leu | Glu | Gln | Gln | Gly | Phe | Ile | His | Thr | Lys | Gly | Cys | Val | Gly |
|     |     |     |     | 215 |     |     |     |     | 220 |     |     |     |     | 225 |
| Gln | Phe | Glu | Lys | Trp | Leu | Gln | Asp | Asn | Leu | Ile | Val | Val | Ala | Gly |
|     |     |     |     | 230 |     |     |     |     | 235 |     |     |     |     | 240 |
| Val | Phe | Met | Gly | Ile | Ala | Leu | Leu | Gln | Ile | Phe | Gly | Ile | Cys | Leu |
|     |     |     |     | 245 |     |     |     |     | 250 |     |     |     |     | 255 |
| Ala | Gln | Asn | Leu | Val | Ser | Asp | Ile | Lys | Ala | Val | Lys | Ala | Asn | Trp |
|     |     |     |     | 260 |     |     |     |     | 265 |     |     |     |     | 270 |
| Ser | Lys | Trp | Asn | Asp | Asp | Phe | Glu | Asn | His | Trp | Leu | Thr | Pro | Thr |
|     |     |     |     | 275 |     |     |     |     | 280 |     |     |     |     | 285 |
| Ile | Ser | Glu | Val | Leu | Ser | Thr | Ala | Gly | Pro | Gln | Gln | Asn | Ser | Leu |
|     |     |     |     | 290 |     |     |     |     | 295 |     |     |     |     | 300 |
| Thr | Gly | Ala | Pro | Gly | Pro | Ala | Pro | Pro | Ser | Arg | His | Val | Phe | Phe |
|     |     |     |     | 305 |     |     |     |     | 310 |     |     |     |     | 315 |
| Gly | Leu | Gly | Gly | Leu | Tyr | Pro | Glu | Pro | Thr | Phe | Lys | Asn | Trp |     |
|     |     |     |     | 320 |     |     |     |     | 325 |     |     |     |     |     |

&lt;210&gt; 6

&lt;211&gt; 351

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; misc\_feature

&lt;223&gt; Incyte ID No: 1802448CD1

&lt;400&gt; 6

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Met | Ala | Leu | Thr | Gly | Ala | Ser | Asp | Pro | Ser | Ala | Glu | Ala | Glu | Ala |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |
| Asn | Gly | Glu | Lys | Pro | Phe | Leu | Leu | Arg | Ala | Leu | Gln | Ile | Ala | Leu |
|     |     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |

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|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Val | Val | Ser | Leu | Tyr | Trp | Val | Thr | Ser | Ile | Ser | Met | Val | Phe | Leu |
|     |     |     |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |
| Asn | Lys | Tyr | Leu | Leu | Asp | Ser | Pro | Ser | Leu | Arg | Leu | Asp | Thr | Pro |
|     |     |     |     | 50  |     |     |     |     | 55  |     |     |     |     | 60  |
| Ile | Phe | Val | Thr | Phe | Tyr | Gln | Cys | Leu | Val | Thr | Thr | Leu | Leu | Cys |
|     |     |     |     | 65  |     |     |     |     | 70  |     |     |     |     | 75  |
| Lys | Gly | Leu | Ser | Ala | Leu | Ala | Ala | Cys | Cys | Pro | Gly | Ala | Val | Asp |
|     |     |     |     | 80  |     |     |     |     | 85  |     |     |     |     | 90  |
| Phe | Pro | Ser | Leu | Arg | Leu | Asp | Leu | Arg | Val | Ala | Arg | Ser | Val | Leu |
|     |     |     |     | 95  |     |     |     |     | 100 |     |     |     |     | 105 |
| Pro | Leu | Ser | Val | Val | Phe | Ile | Gly | Met | Ile | Thr | Phe | Asn | Asn | Leu |
|     |     |     |     | 110 |     |     |     |     | 115 |     |     |     |     | 120 |
| Cys | Leu | Lys | Tyr | Val | Gly | Val | Ala | Phe | Tyr | Asn | Val | Gly | Arg | Ser |
|     |     |     |     | 125 |     |     |     |     | 130 |     |     |     |     | 135 |
| Leu | Thr | Thr | Val | Phe | Asn | Val | Leu | Leu | Ser | Tyr | Leu | Leu | Leu | Lys |
|     |     |     |     | 140 |     |     |     |     | 145 |     |     |     |     | 150 |
| Gln | Thr | Thr | Ser | Phe | Tyr | Ala | Leu | Leu | Thr | Cys | Gly | Ile | Ile | Ile |
|     |     |     |     | 155 |     |     |     |     | 160 |     |     |     |     | 165 |
| Gly | Gly | Phe | Trp | Leu | Gly | Val | Asp | Gln | Glu | Gly | Ala | Glu | Gly | Thr |
|     |     |     |     | 170 |     |     |     |     | 175 |     |     |     |     | 180 |
| Leu | Ser | Trp | Leu | Gly | Thr | Val | Phe | Gly | Val | Leu | Ala | Ser | Leu | Cys |
|     |     |     |     | 185 |     |     |     |     | 190 |     |     |     |     | 195 |
| Val | Ser | Leu | Asn | Ala | Ile | Tyr | Thr | Thr | Lys | Val | Leu | Pro | Ala | Val |
|     |     |     |     | 200 |     |     |     |     | 205 |     |     |     |     | 210 |
| Asp | Gly | Ser | Ile | Trp | Arg | Leu | Thr | Phe | Tyr | Asn | Asn | Val | Asn | Ala |
|     |     |     |     | 215 |     |     |     |     | 220 |     |     |     |     | 225 |
| Cys | Ile | Leu | Phe | Leu | Pro | Leu | Leu | Leu | Leu | Leu | Gly | Glu | Leu | Gln |
|     |     |     |     | 230 |     |     |     |     | 235 |     |     |     |     | 240 |
| Ala | Leu | Arg | Asp | Phe | Ala | Gln | Leu | Gly | Ser | Ala | His | Phe | Trp | Gly |
|     |     |     |     | 245 |     |     |     |     | 250 |     |     |     |     | 255 |
| Met | Met | Thr | Leu | Gly | Gly | Leu | Phe | Gly | Phe | Ala | Ile | Gly | Tyr | Val |
|     |     |     |     | 260 |     |     |     |     | 265 |     |     |     |     | 270 |
| Thr | Gly | Leu | Gln | Ile | Lys | Phe | Thr | Ser | Pro | Leu | Thr | His | Asn | Val |
|     |     |     |     | 275 |     |     |     |     | 280 |     |     |     |     | 285 |
| Ser | Gly | Thr | Ala | Lys | Ala | Cys | Ala | Gln | Thr | Val | Leu | Ala | Val | Leu |
|     |     |     |     | 290 |     |     |     |     | 295 |     |     |     |     | 300 |
| Tyr | Tyr | Glu | Glu | Thr | Lys | Ser | Phe | Leu | Trp | Trp | Thr | Ser | Asn | Met |
|     |     |     |     | 305 |     |     |     |     | 310 |     |     |     |     | 315 |
| Met | Val | Leu | Gly | Gly | Ser | Ser | Ala | Tyr | Thr | Trp | Val | Arg | Gly | Trp |
|     |     |     |     | 320 |     |     |     |     | 325 |     |     |     |     | 330 |
| Glu | Met | Lys | Lys | Thr | Pro | Glu | Glu | Pro | Ser | Pro | Lys | Asp | Ser | Glu |
|     |     |     |     | 335 |     |     |     |     | 340 |     |     |     |     | 345 |
| Lys | Ser | Ala | Met | Gly | Val |     |     |     |     |     |     |     |     |     |
|     |     |     |     | 350 |     |     |     |     |     |     |     |     |     |     |

&lt;210&gt; 7

&lt;211&gt; 489

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; misc\_feature

&lt;223&gt; Incyte ID No: 2057214CD1

&lt;400&gt; 7

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Met | Glu | Ala | Pro | Asp | Tyr | Glu | Val | Leu | Ser | Val | Arg | Glu | Gln | Leu |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |
| Phe | His | Glu | Arg | Ile | Arg | Glu | Cys | Ile | Ile | Ser | Thr | Leu | Leu | Phe |
|     |     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |
| Ala | Thr | Leu | Tyr | Ile | Leu | Cys | His | Ile | Phe | Leu | Thr | Arg | Phe | Lys |
|     |     |     |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |
| Lys | Pro | Ala | Glu | Phe | Thr | Thr | Val | Asp | Asp | Glu | Asp | Ala | Thr | Val |

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|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
|     |     |     |     | 50  |     |     |     |     | 55  |     |     |     | 60  |     |
| Asn | Lys | Ile | Ala | Leu | Glu | Leu | Cys | Thr | Phe | Thr | Leu | Ala | Ile | Ala |
|     |     |     |     | 65  |     |     |     |     | 70  |     |     |     |     | 75  |
| Leu | Gly | Ala | Val | Leu | Leu | Leu | Pro | Phe | Ser | Ile | Ile | Ser | Asn | Glu |
|     |     |     |     | 80  |     |     |     |     | 85  |     |     |     |     | 90  |
| Val | Leu | Leu | Ser | Leu | Pro | Arg | Asn | Tyr | Tyr | Ile | Gln | Trp | Leu | Asn |
|     |     |     |     | 95  |     |     |     |     | 100 |     |     |     |     | 105 |
| Gly | Ser | Leu | Ile | His | Gly | Leu | Trp | Asn | Leu | Val | Phe | Leu | Phe | Ser |
|     |     |     |     | 110 |     |     |     |     | 115 |     |     |     |     | 120 |
| Asn | Leu | Ser | Leu | Ile | Phe | Leu | Met | Pro | Phe | Ala | Tyr | Phe | Phe | Thr |
|     |     |     |     | 125 |     |     |     |     | 130 |     |     |     |     | 135 |
| Glu | Ser | Glu | Gly | Phe | Ala | Gly | Ser | Arg | Lys | Gly | Val | Leu | Gly | Arg |
|     |     |     |     | 140 |     |     |     |     | 145 |     |     |     |     | 150 |
| Val | Tyr | Glu | Thr | Val | Val | Met | Leu | Met | Leu | Leu | Thr | Leu | Leu | Val |
|     |     |     |     | 155 |     |     |     |     | 160 |     |     |     |     | 165 |
| Leu | Gly | Met | Val | Trp | Val | Ala | Ser | Ala | Ile | Val | Asp | Lys | Asn | Lys |
|     |     |     |     | 170 |     |     |     |     | 175 |     |     |     |     | 180 |
| Ala | Asn | Arg | Glu | Ser | Leu | Tyr | Asp | Phe | Trp | Glu | Tyr | Tyr | Leu | Pro |
|     |     |     |     | 185 |     |     |     |     | 190 |     |     |     |     | 195 |
| Tyr | Leu | Tyr | Ser | Cys | Ile | Ser | Phe | Leu | Gly | Val | Leu | Leu | Leu | Leu |
|     |     |     |     | 200 |     |     |     |     | 205 |     |     |     |     | 210 |
| Val | Cys | Thr | Pro | Leu | Gly | Leu | Ala | Arg | Met | Phe | Ser | Val | Thr | Gly |
|     |     |     |     | 215 |     |     |     |     | 220 |     |     |     |     | 225 |
| Lys | Leu | Leu | Val | Lys | Pro | Arg | Leu | Leu | Glu | Asp | Leu | Glu | Glu | Gln |
|     |     |     |     | 230 |     |     |     |     | 235 |     |     |     |     | 240 |
| Leu | Tyr | Cys | Ser | Ala | Phe | Glu | Glu | Ala | Ala | Leu | Thr | Arg | Arg | Ile |
|     |     |     |     | 245 |     |     |     |     | 250 |     |     |     |     | 255 |
| Cys | Asn | Pro | Thr | Ser | Cys | Trp | Leu | Pro | Leu | Asp | Met | Glu | Leu | Leu |
|     |     |     |     | 260 |     |     |     |     | 265 |     |     |     |     | 270 |
| His | Arg | Gln | Val | Leu | Ala | Leu | Gln | Thr | Gln | Arg | Val | Leu | Leu | Glu |
|     |     |     |     | 275 |     |     |     |     | 280 |     |     |     |     | 285 |
| Lys | Arg | Arg | Lys | Ala | Ser | Ala | Trp | Gln | Arg | Asn | Leu | Gly | Tyr | Pro |
|     |     |     |     | 290 |     |     |     |     | 295 |     |     |     |     | 300 |
| Leu | Ala | Met | Leu | Cys | Leu | Leu | Val | Leu | Thr | Gly | Leu | Ser | Val | Leu |
|     |     |     |     | 305 |     |     |     |     | 310 |     |     |     |     | 315 |
| Ile | Val | Ala | Ile | His | Ile | Leu | Glu | Leu | Leu | Ile | Asp | Glu | Ala | Ala |
|     |     |     |     | 320 |     |     |     |     | 325 |     |     |     |     | 330 |
| Met | Pro | Arg | Gly | Met | Gln | Gly | Thr | Ser | Leu | Gly | Gln | Val | Ser | Phe |
|     |     |     |     | 335 |     |     |     |     | 340 |     |     |     |     | 345 |
| Ser | Lys | Leu | Gly | Ser | Phe | Gly | Ala | Val | Ile | Gln | Val | Val | Leu | Ile |
|     |     |     |     | 350 |     |     |     |     | 355 |     |     |     |     | 360 |
| Phe | Tyr | Leu | Met | Val | Ser | Ser | Val | Val | Gly | Phe | Tyr | Ser | Ser | Pro |
|     |     |     |     | 365 |     |     |     |     | 370 |     |     |     |     | 375 |
| Leu | Phe | Arg | Ser | Leu | Arg | Pro | Arg | Trp | His | Asp | Thr | Ala | Met | Thr |
|     |     |     |     | 380 |     |     |     |     | 385 |     |     |     |     | 390 |
| Gln | Ile | Ile | Gly | Asn | Cys | Val | Cys | Leu | Leu | Val | Leu | Ser | Ser | Ala |
|     |     |     |     | 395 |     |     |     |     | 400 |     |     |     |     | 405 |
| Leu | Pro | Val | Phe | Ser | Arg | Thr | Leu | Gly | Leu | Thr | Arg | Phe | Asp | Leu |
|     |     |     |     | 410 |     |     |     |     | 415 |     |     |     |     | 420 |
| Leu | Gly | Asp | Phe | Gly | Arg | Phe | Asn | Trp | Leu | Gly | Asn | Phe | Tyr | Ile |
|     |     |     |     | 425 |     |     |     |     | 430 |     |     |     |     | 435 |
| Val | Phe | Leu | Tyr | Asn | Ala | Ala | Phe | Ala | Gly | Leu | Thr | Thr | Leu | Cys |
|     |     |     |     | 440 |     |     |     |     | 445 |     |     |     |     | 450 |
| Leu | Val | Lys | Thr | Phe | Thr | Ala | Ala | Val | Arg | Ala | Glu | Leu | Ile | Arg |
|     |     |     |     | 455 |     |     |     |     | 460 |     |     |     |     | 465 |
| Ala | Phe | Gly | Leu | Asp | Arg | Leu | Pro | Leu | Pro | Val | Ser | Gly | Phe | Pro |
|     |     |     |     | 470 |     |     |     |     | 475 |     |     |     |     | 480 |
| Gln | Ala | Ser | Arg | Lys | Thr | Gln | His | Gln |     |     |     |     |     |     |
|     |     |     |     | 485 |     |     |     |     |     |     |     |     |     |     |

&lt;210&gt; 8

&lt;211&gt; 291

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PF-0681 PCT

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; misc\_feature

&lt;223&gt; Incyte ID No: 2448177CD1

&lt;400&gt; 8

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Met | Val | Trp | Lys | Lys | Leu | Gly | Ser | Arg | Asn | Phe | Ser | Ser | Cys | Pro |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |
| Ser | Gly | Ser | Ile | Gln | Trp | Ile | Trp | Asp | Val | Leu | Gly | Glu | Cys | Ala |
|     |     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |
| Gln | Asp | Gly | Trp | Asp | Glu | Ala | Ser | Val | Gly | Leu | Gly | Leu | Ile | Ser |
|     |     |     |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |
| Ile | Leu | Cys | Phe | Ala | Ala | Ser | Thr | Phe | Pro | Gln | Phe | Ile | Lys | Ala |
|     |     |     |     | 50  |     |     |     |     | 55  |     |     |     |     | 60  |
| Tyr | Lys | Thr | Gly | Asn | Met | Asp | Gln | Ala | Leu | Ser | Leu | Trp | Phe | Leu |
|     |     |     |     | 65  |     |     |     |     | 70  |     |     |     |     | 75  |
| Leu | Gly | Trp | Ile | Gly | Gly | Asp | Ser | Cys | Asn | Leu | Ile | Gly | Ser | Phe |
|     |     |     |     | 80  |     |     |     |     | 85  |     |     |     |     | 90  |
| Leu | Ala | Asp | Gln | Leu | Pro | Leu | Gln | Thr | Tyr | Thr | Ala | Val | Tyr | Tyr |
|     |     |     |     | 95  |     |     |     |     | 100 |     |     |     |     | 105 |
| Val | Leu | Ala | Asp | Leu | Val | Met | Leu | Thr | Leu | Tyr | Phe | Tyr | Tyr | Lys |
|     |     |     |     | 110 |     |     |     |     | 115 |     |     |     |     | 120 |
| Phe | Arg | Thr | Arg | Pro | Ser | Leu | Leu | Ser | Ala | Pro | Ile | Asn | Ser | Val |
|     |     |     |     | 125 |     |     |     |     | 130 |     |     |     |     | 135 |
| Leu | Leu | Phe | Leu | Met | Gly | Met | Ala | Cys | Ala | Thr | Pro | Leu | Leu | Ser |
|     |     |     |     | 140 |     |     |     |     | 145 |     |     |     |     | 150 |
| Ala | Ala | Gly | Pro | Val | Ala | Ala | Pro | Arg | Glu | Ala | Phe | Arg | Gly | Arg |
|     |     |     |     | 155 |     |     |     |     | 160 |     |     |     |     | 165 |
| Ala | Leu | Leu | Ser | Val | Glu | Ser | Gly | Ser | Lys | Pro | Phe | Thr | Arg | Gln |
|     |     |     |     | 170 |     |     |     |     | 175 |     |     |     |     | 180 |
| Glu | Val | Ile | Gly | Phe | Val | Ile | Gly | Ser | Ile | Ser | Ser | Val | Leu | Tyr |
|     |     |     |     | 185 |     |     |     |     | 190 |     |     |     |     | 195 |
| Leu | Leu | Ser | Arg | Leu | Pro | Gln | Ile | Arg | Thr | Asn | Phe | Leu | Arg | Lys |
|     |     |     |     | 200 |     |     |     |     | 205 |     |     |     |     | 210 |
| Ser | Thr | Gln | Gly | Ile | Ser | Tyr | Ser | Leu | Phe | Ala | Leu | Val | Met | Leu |
|     |     |     |     | 215 |     |     |     |     | 220 |     |     |     |     | 225 |
| Gly | Asn | Thr | Leu | Tyr | Gly | Leu | Ser | Val | Leu | Leu | Lys | Asn | Pro | Glu |
|     |     |     |     | 230 |     |     |     |     | 235 |     |     |     |     | 240 |
| Glu | Gly | Gln | Ser | Glu | Gly | Ser | Tyr | Leu | Leu | His | His | Leu | Pro | Trp |
|     |     |     |     | 245 |     |     |     |     | 250 |     |     |     |     | 255 |
| Leu | Val | Gly | Ser | Leu | Gly | Val | Leu | Leu | Leu | Asp | Thr | Ile | Ile | Ser |
|     |     |     |     | 260 |     |     |     |     | 265 |     |     |     |     | 270 |
| Ile | Gln | Phe | Leu | Val | Tyr | Arg | Arg | Ser | Thr | Ala | Ala | Ser | Glu | Leu |
|     |     |     |     | 275 |     |     |     |     | 280 |     |     |     |     | 285 |
| Glu | Pro | Leu | Leu | Pro | Ser |     |     |     |     |     |     |     |     |     |
|     |     |     |     | 290 |     |     |     |     |     |     |     |     |     |     |

&lt;210&gt; 9

&lt;211&gt; 172

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; misc\_feature

&lt;223&gt; Incyte ID No: 2741701CD1

&lt;400&gt; 9

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Met | Ser | Ser | Ser | Gly | Gly | Ala | Pro | Gly | Ala | Ser | Ala | Ser | Ser | Ala |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |
| Pro | Pro | Ala | Gln | Glu | Glu | Gly | Met | Thr | Trp | Trp | Tyr | Arg | Trp | Leu |



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|   |     |  |     |  |     |
|---|-----|--|-----|--|-----|
|   | 20  |  | 25  |  | 30  |
| Cys Arg Leu Ser Gly Val Leu Gly Ala Val Ser Cys Ala Ile Ser |     |  |     |  |     |
|   | 35  |  | 40  |  | 45  |
| Gly Leu Phe Asn Cys Ile Thr Ile His Pro Leu Asn Ile Ala Ala |     |  |     |  |     |
|   | 50  |  | 55  |  | 60  |
| Gly Val Trp Met Ile Met Asn Ala Phe Ile Leu Leu Leu Cys Glu |     |  |     |  |     |
|   | 65  |  | 70  |  | 75  |
| Ala Pro Phe Cys Cys Gln Phe Ile Glu Phe Ala Asn Thr Val Ala |     |  |     |  |     |
|   | 80  |  | 85  |  | 90  |
| Glu Lys Val Asp Arg Leu Arg Ser Trp Gln Lys Ala Val Phe Tyr |     |  |     |  |     |
|   | 95  |  | 100 |  | 105 |
| Cys Gly Met Ala Val Val Pro Ile Val Ile Ser Leu Thr Leu Thr |     |  |     |  |     |
|   | 110 |  | 115 |  | 120 |
| Thr Leu Leu Gly Asn Ala Ile Ala Phe Ala Thr Gly Val Leu Tyr |     |  |     |  |     |
|   | 125 |  | 130 |  | 135 |
| Gly Leu Ser Ala Leu Gly Lys Lys Gly Asp Ala Ile Ser Tyr Ala |     |  |     |  |     |
|   | 140 |  | 145 |  | 150 |
| Arg Ile Gln Gln Gln Arg Gln Gln Ala Asp Glu Glu Lys Leu Ala |     |  |     |  |     |
|   | 155 |  | 160 |  | 165 |
| Glu Thr Leu Glu Gly Glu Leu                                 |     |  |     |  |     |
|   | 170 |  |     |  |     |

&lt;210&gt; 10

&lt;211&gt; 155

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; misc\_feature

&lt;223&gt; Incyte ID No: 3487228CD1

&lt;400&gt; 10

|   |     |  |     |  |     |
|---|-----|--|-----|--|-----|
| Met Ala Gly Glu Ile Thr Glu Thr Gly Glu Leu Tyr Ser Ser Tyr |     |  |     |  |     |
| 1   | 5   |  | 10  |  | 15  |
| Val Gly Leu Val Tyr Met Phe Asn Leu Ile Val Gly Thr Gly Ala |     |  |     |  |     |
|   | 20  |  | 25  |  | 30  |
| Leu Thr Met Pro Lys Ala Phe Ala Thr Ala Gly Trp Leu Val Ser |     |  |     |  |     |
|   | 35  |  | 40  |  | 45  |
| Leu Val Leu Leu Val Phe Leu Gly Phe Met Ser Phe Met Thr Thr |     |  |     |  |     |
|   | 50  |  | 55  |  | 60  |
| Thr Phe Val Ile Glu Ala Met Ala Ala Ala Asn Ala Gln Leu His |     |  |     |  |     |
|   | 65  |  | 70  |  | 75  |
| Trp Lys Arg Met Glu Asn Leu Lys Glu Glu Glu Asp Asp Asp Ser |     |  |     |  |     |
|   | 80  |  | 85  |  | 90  |
| Ser Thr Ala Ser Asp Ser Asp Val Leu Ile Arg Asp Asn Tyr Glu |     |  |     |  |     |
|   | 95  |  | 100 |  | 105 |
| Arg Ala Glu Lys Arg Pro Ile Leu Ser Val Arg Lys Ser Trp Gly |     |  |     |  |     |
|   | 110 |  | 115 |  | 120 |
| Ser Arg Gly Pro Ala Leu Pro Ser Gly Pro Gln Gly Ser Leu Ser |     |  |     |  |     |
|   | 125 |  | 130 |  | 135 |
| Ser Trp Arg Gly Pro Trp Arg Gly Ser Pro Gln Ile Leu Ala Phe |     |  |     |  |     |
|   | 140 |  | 145 |  | 150 |
| Pro Ala Pro Gly Phe   |     |  |     |  |     |
|   | 155 |  |     |  |     |

&lt;210&gt; 11

&lt;211&gt; 578

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; misc\_feature

&lt;223&gt; Incyte ID No: 3671426CD1

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PCT/US00/07817

PF-0681 PCT

&lt;400&gt; 11

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Met | Leu | Cys | Ser | Leu | Leu | Leu | Cys | Glu | Cys | Leu | Leu | Leu | Val | Ala |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |
| Gly | Tyr | Ala | His | Asp | Asp | Asp | Trp | Ile | Asp | Pro | Thr | Asp | Met | Leu |
|     |     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |
| Asn | Tyr | Asp | Ala | Ala | Ser | Gly | Thr | Met | Arg | Lys | Ser | Gln | Ala | Lys |
|     |     |     |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |
| Tyr | Gly | Ile | Ser | Gly | Glu | Lys | Asp | Val | Ser | Pro | Asp | Leu | Ser | Cys |
|     |     |     |     | 50  |     |     |     |     | 55  |     |     |     |     | 60  |
| Ala | Asp | Glu | Ile | Ser | Glu | Cys | Tyr | His | Lys | Leu | Asp | Ser | Leu | Thr |
|     |     |     |     | 65  |     |     |     |     | 70  |     |     |     |     | 75  |
| Tyr | Lys | Ile | Asp | Glu | Cys | Glu | Lys | Lys | Lys | Arg | Glu | Asp | Tyr | Glu |
|     |     |     |     | 80  |     |     |     |     | 85  |     |     |     |     | 90  |
| Ser | Gln | Ser | Asn | Pro | Val | Phe | Arg | Arg | Tyr | Leu | Asn | Lys | Ile | Leu |
|     |     |     |     | 95  |     |     |     |     | 100 |     |     |     |     | 105 |
| Ile | Glu | Ala | Gly | Lys | Leu | Gly | Leu | Pro | Asp | Glu | Asn | Lys | Gly | Asp |
|     |     |     |     | 110 |     |     |     |     | 115 |     |     |     |     | 120 |
| Met | His | Tyr | Asp | Ala | Glu | Ile | Ile | Leu | Lys | Arg | Glu | Thr | Leu | Leu |
|     |     |     |     | 125 |     |     |     |     | 130 |     |     |     |     | 135 |
| Glu | Ile | Gln | Lys | Phe | Leu | Asn | Gly | Glu | Asp | Trp | Lys | Pro | Gly | Ala |
|     |     |     |     | 140 |     |     |     |     | 145 |     |     |     |     | 150 |
| Leu | Asp | Asp | Ala | Leu | Ser | Asp | Ile | Leu | Ile | Asn | Phe | Lys | Phe | His |
|     |     |     |     | 155 |     |     |     |     | 160 |     |     |     |     | 165 |
| Asp | Phe | Glu | Thr | Trp | Lys | Trp | Arg | Phe | Glu | Asp | Ser | Phe | Gly | Val |
|     |     |     |     | 170 |     |     |     |     | 175 |     |     |     |     | 180 |
| Asp | Pro | Tyr | Asn | Val | Leu | Met | Val | Leu | Leu | Cys | Leu | Leu | Cys | Ile |
|     |     |     |     | 185 |     |     |     |     | 190 |     |     |     |     | 195 |
| Val | Val | Leu | Val | Ala | Thr | Glu | Leu | Trp | Thr | Tyr | Val | Arg | Trp | Tyr |
|     |     |     |     | 200 |     |     |     |     | 205 |     |     |     |     | 210 |
| Thr | Gln | Leu | Arg | Arg | Val | Leu | Ile | Ile | Ser | Phe | Leu | Phe | Ser | Leu |
|     |     |     |     | 215 |     |     |     |     | 220 |     |     |     |     | 225 |
| Gly | Trp | Asn | Trp | Met | Tyr | Leu | Tyr | Lys | Leu | Ala | Phe | Ala | Gln | His |
|     |     |     |     | 230 |     |     |     |     | 235 |     |     |     |     | 240 |
| Gln | Ala | Glu | Val | Ala | Lys | Met | Glu | Pro | Leu | Asn | Asn | Val | Cys | Ala |
|     |     |     |     | 245 |     |     |     |     | 250 |     |     |     |     | 255 |
| Lys | Lys | Met | Asp | Trp | Thr | Gly | Ser | Ile | Trp | Glu | Trp | Phe | Arg | Ser |
|     |     |     |     | 260 |     |     |     |     | 265 |     |     |     |     | 270 |
| Ser | Trp | Thr | Tyr | Lys | Asp | Asp | Pro | Cys | Gln | Lys | Tyr | Tyr | Glu | Leu |
|     |     |     |     | 275 |     |     |     |     | 280 |     |     |     |     | 285 |
| Leu | Leu | Val | Asn | Pro | Ile | Trp | Leu | Val | Pro | Pro | Thr | Lys | Ala | Leu |
|     |     |     |     | 290 |     |     |     |     | 295 |     |     |     |     | 300 |
| Ala | Val | Thr | Phe | Thr | Thr | Phe | Val | Thr | Glu | Pro | Leu | Lys | His | Ile |
|     |     |     |     | 305 |     |     |     |     | 310 |     |     |     |     | 315 |
| Gly | Lys | Gly | Thr | Gly | Glu | Phe | Ile | Lys | Ala | Leu | Met | Lys | Glu | Ile |
|     |     |     |     | 320 |     |     |     |     | 325 |     |     |     |     | 330 |
| Pro | Ala | Leu | Leu | His | Leu | Pro | Val | Leu | Ile | Ile | Met | Ala | Leu | Ala |
|     |     |     |     | 335 |     |     |     |     | 340 |     |     |     |     | 345 |
| Ile | Leu | Ser | Phe | Cys | Tyr | Gly | Ala | Gly | Lys | Ser | Val | His | Val | Leu |
|     |     |     |     | 350 |     |     |     |     | 355 |     |     |     |     | 360 |
| Arg | His | Ile | Gly | Gly | Pro | Glu | Arg | Glu | Pro | Pro | Gln | Ala | Leu | Trp |
|     |     |     |     | 365 |     |     |     |     | 370 |     |     |     |     | 375 |
| Pro | Arg | Asp | Arg | Arg | Arg | Gln | Glu | Glu | Ile | Asp | Tyr | Arg | Pro | Asp |
|     |     |     |     | 380 |     |     |     |     | 385 |     |     |     |     | 390 |
| Gly | Gly | Ala | Gly | Asp | Ala | Asp | Phe | His | Tyr | Arg | Gly | Gln | Met | Gly |
|     |     |     |     | 395 |     |     |     |     | 400 |     |     |     |     | 405 |
| Pro | Thr | Glu | Gln | Gly | Pro | Tyr | Ala | Lys | Thr | Tyr | Glu | Gly | Arg | Arg |
|     |     |     |     | 410 |     |     |     |     | 415 |     |     |     |     | 420 |
| Glu | Ile | Leu | Arg | Glu | Arg | Asp | Val | Asp | Leu | Arg | Phe | Gln | Thr | Gly |
|     |     |     |     | 425 |     |     |     |     | 430 |     |     |     |     | 435 |
| Asn | Lys | Ser | Pro | Glu | Val | Leu | Arg | Ala | Phe | Asp | Val | Pro | Asp | Ala |
|     |     |     |     | 440 |     |     |     |     | 445 |     |     |     |     | 450 |

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|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Glu | Ala | Arg | Glu | His | Pro | Thr | Val | Val | Pro | Ser | His | Lys | Ser | Pro |
|     |     |     |     | 455 |     |     |     |     | 460 |     |     |     |     | 465 |
| Val | Leu | Asp | Thr | Lys | Pro | Lys | Glu | Thr | Gly | Gly | Ile | Leu | Gly | Lys |
|     |     |     |     | 470 |     |     |     |     | 475 |     |     |     |     | 480 |
| Ala | His | Arg | Lys | Lys | Ala | Val | Leu | Lys | Ala | Ala | Ser | Arg | Pro | Ser |
|     |     |     |     | 485 |     |     |     |     | 490 |     |     |     |     | 495 |
| Leu | Ser | Leu | Ala | Lys | Thr | His | Gln | Gly | Ile | Gln | Lys | Val | His | Pro |
|     |     |     |     | 500 |     |     |     |     | 505 |     |     |     |     | 510 |
| Gln | Arg | Lys | Arg | Pro | Ser | Ser | Ser | Leu | Lys | Pro | Gln | Ala | Ala | Gln |
|     |     |     |     | 515 |     |     |     |     | 520 |     |     |     |     | 525 |
| Thr | Lys | Ala | Ala | His | Thr | Ala | Pro | Gln | Glu | Val | Trp | Leu | Asp | His |
|     |     |     |     | 530 |     |     |     |     | 535 |     |     |     |     | 540 |
| Val | Asp | Arg | Ile | Arg | Ser | Ala | Ala | Pro | Val | Ala | Arg | Gly | Thr | Pro |
|     |     |     |     | 545 |     |     |     |     | 550 |     |     |     |     | 555 |
| Ala | Gln | Thr | Thr | Ala | Ser | Ser | Leu | Leu | Arg | Ala | Leu | Tyr | Pro | Phe |
|     |     |     |     | 560 |     |     |     |     | 565 |     |     |     |     | 570 |
| Gly | Asp | Glu | Val | Tyr | Phe | Asp | Ser |     |     |     |     |     |     |     |
|     |     |     |     | 575 |     |     |     |     |     |     |     |     |     |     |

&lt;210&gt; 12

&lt;211&gt; 313

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; misc\_feature

&lt;223&gt; Incyte ID No: 4020882CD1

&lt;400&gt; 12

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Met | Asp | Gly | Ile | Ile | Glu | Gln | Lys | Ser | Met | Leu | Val | His | Ser | Lys |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |
| Ile | Ser | Asp | Ala | Gly | Lys | Arg | Asn | Gly | Leu | Ile | Asn | Thr | Arg | Asn |
|     |     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |
| Leu | Met | Ala | Glu | Ser | Arg | Asp | Gly | Leu | Val | Ser | Val | Tyr | Pro | Ala |
|     |     |     |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |
| Pro | Gln | Tyr | Gln | Ser | His | Arg | Val | Gly | Ala | Ser | Thr | Val | Pro | Ala |
|     |     |     |     | 50  |     |     |     |     | 55  |     |     |     |     | 60  |
| Ser | Leu | Asp | Ser | Ser | Arg | Ser | Glu | Pro | Met | Gln | Gln | Leu | Leu | Asp |
|     |     |     |     | 65  |     |     |     |     | 70  |     |     |     |     | 75  |
| Pro | Asn | Thr | Leu | Gln | Gln | Ser | Val | Glu | Ser | Arg | Tyr | Arg | Pro | Asn |
|     |     |     |     | 80  |     |     |     |     | 85  |     |     |     |     | 90  |
| Ile | Ile | Leu | Tyr | Ser | Glu | Gly | Val | Leu | Arg | Ser | Trp | Gly | Asp | Gly |
|     |     |     |     | 95  |     |     |     |     | 100 |     |     |     |     | 105 |
| Val | Ala | Ala | Asp | Cys | Cys | Glu | Thr | Thr | Phe | Ile | Glu | Asp | Arg | Ser |
|     |     |     |     | 110 |     |     |     |     | 115 |     |     |     |     | 120 |
| Pro | Thr | Lys | Asp | Ser | Leu | Glu | Tyr | Pro | Asp | Gly | Lys | Phe | Ile | Asp |
|     |     |     |     | 125 |     |     |     |     | 130 |     |     |     |     | 135 |
| Leu | Ser | Ala | Asp | Asp | Ile | Lys | Ile | His | Thr | Leu | Ser | Tyr | Asp | Val |
|     |     |     |     | 140 |     |     |     |     | 145 |     |     |     |     | 150 |
| Glu | Glu | Glu | Glu | Glu | Phe | Gln | Glu | Leu | Glu | Ser | Asp | Tyr | Ser | Ser |
|     |     |     |     | 155 |     |     |     |     | 160 |     |     |     |     | 165 |
| Asp | Thr | Glu | Ser | Glu | Asp | Asn | Phe | Leu | Met | Met | Pro | Pro | Arg | Asp |
|     |     |     |     | 170 |     |     |     |     | 175 |     |     |     |     | 180 |
| His | Leu | Gly | Leu | Ser | Val | Phe | Ser | Met | Leu | Cys | Cys | Phe | Trp | Pro |
|     |     |     |     | 185 |     |     |     |     | 190 |     |     |     |     | 195 |
| Leu | Gly | Ile | Ala | Ala | Phe | Tyr | Leu | Ser | His | Glu | Thr | Asn | Lys | Ala |
|     |     |     |     | 200 |     |     |     |     | 205 |     |     |     |     | 210 |
| Val | Ala | Lys | Gly | Asp | Leu | His | Gln | Ala | Ser | Thr | Ser | Ser | Arg | Arg |
|     |     |     |     | 215 |     |     |     |     | 220 |     |     |     |     | 225 |
| Ala | Leu | Phe | Leu | Ala | Val | Leu | Ser | Ile | Thr | Ile | Gly | Thr | Gly | Val |
|     |     |     |     | 230 |     |     |     |     | 235 |     |     |     |     | 240 |
| Tyr | Val | Gly | Val | Ala | Trp | Pro | Trp | Pro | Ser | Ser | Pro | Thr | Ser | Pro |

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|                     |     |                     |     |
|---------------------|-----|---------------------|-----|
| Arg Thr Thr Thr     | 245 | 250                 | 255 |
| Cys Glu Leu Pro Ala | 260 | Asn Gly Gly Gly Ala | Pro |
| Gly Ala Arg Ser Val | 265 | Lys Gln Ala Tyr Arg | Met |
| Met Leu Tyr Ser Thr | 275 | 280                 | 285 |
| Asn Asp Cys Gln Met | 290 | Met Pro Arg Ser     | Pro |
| Gly Ile Ser Tyr Pro | 305 | 295                 | 300 |
| Trp Ile Tyr Phe Val | 310 | Phe Ile Leu         |     |

&lt;210&gt; 13

&lt;211&gt; 205

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; misc\_feature

&lt;223&gt; Incyte ID No: 4069777CD1

&lt;400&gt; 13

|                     |                 |                     |     |
|---------------------|-----------------|---------------------|-----|
| Met Met Ser Arg Asp | Val Ile Ala Leu | Val Ser Gln Val Leu | Pro |
| 1                   | 5               | 10                  | 15  |
| Val Tyr Ser Val Phe | His Val Phe Glu | Ala Ile Cys Cys Val | Tyr |
|                     | 20              | 25                  | 30  |
| Gly Gly Val Leu Arg | Gly Thr Gly Lys | Gln Ala Phe Gly Ala | Ala |
|                     | 35              | 40                  | 45  |
| Val Asn Ala Ile Thr | Tyr Tyr Ile Ile | Gly Leu Pro Leu Gly | Ile |
|                     | 50              | 55                  | 60  |
| Leu Leu Thr Phe Val | Val Arg Met Arg | Ile Met Gly Leu Trp | Leu |
|                     | 65              | 70                  | 75  |
| Gly Met Leu Ala Cys | Val Phe Leu Ala | Thr Ala Ala Phe Val | Ala |
|                     | 80              | 85                  | 90  |
| Tyr Thr Ala Arg Leu | Asp Trp Lys Leu | Ala Ala Glu Glu Ala | Lys |
|                     | 95              | 100                 | 105 |
| Lys His Ser Gly Arg | Gln Gln Gln Gln | Arg Ala Glu Ser Thr | Ala |
|                     | 110             | 115                 | 120 |
| Thr Arg Pro Gly Pro | Glu Lys Ala Val | Leu Ser Ser Val Ala | Thr |
|                     | 125             | 130                 | 135 |
| Gly Ser Ser Pro Gly | Ile Thr Leu Thr | Thr Tyr Ser Arg Ser | Glu |
|                     | 140             | 145                 | 150 |
| Cys His Val Asp Phe | Phe Arg Thr Pro | Glu Glu Ala His Ala | Leu |
|                     | 155             | 160                 | 165 |
| Ser Ala Pro Thr Ser | Arg Leu Ser Val | Lys Gln Leu Val Ile | Arg |
|                     | 170             | 175                 | 180 |
| Arg Gly Ala Ala Leu | Gly Ala Ala Ser | Ala Thr Leu Met Val | Gly |
|                     | 185             | 190                 | 195 |
| Leu Thr Val Arg Ile | Leu Ala Thr Arg | His                 |     |
|                     | 200             | 205                 |     |

&lt;210&gt; 14

&lt;211&gt; 371

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; misc\_feature

&lt;223&gt; Incyte ID No: 5309830CD1

&lt;400&gt; 14

|                     |                 |                     |     |
|---------------------|-----------------|---------------------|-----|
| Met Ala Trp Thr Lys | Tyr Gln Leu Phe | Leu Ala Gly Leu Met | Leu |
| 1                   | 5               | 10                  | 15  |
| Val Thr Gly Ser Ile | Asn Thr Leu Ser | Ala Lys Trp Ala Asp | Asn |
|                     | 20              | 25                  | 30  |

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|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Phe | Met | Ala | Glu | Gly | Cys | Gly | Gly | Ser | Lys | Glu | His | Ser | Phe | Gln |
|     |     |     |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |
| His | Pro | Phe | Leu | Gln | Ala | Val | Gly | Met | Phe | Leu | Gly | Glu | Phe | Ser |
|     |     |     |     | 50  |     |     |     |     | 55  |     |     |     |     | 60  |
| Cys | Leu | Ala | Ala | Phe | Tyr | Leu | Leu | Arg | Cys | Arg | Ala | Ala | Gly | Gln |
|     |     |     |     | 65  |     |     |     |     | 70  |     |     |     |     | 75  |
| Ser | Asp | Ser | Ser | Val | Asp | Pro | Gln | Gln | Pro | Phe | Asn | Pro | Leu | Leu |
|     |     |     |     | 80  |     |     |     |     | 85  |     |     |     |     | 90  |
| Phe | Leu | Pro | Pro | Ala | Leu | Cys | Asp | Met | Thr | Gly | Thr | Ser | Leu | Met |
|     |     |     |     | 95  |     |     |     |     | 100 |     |     |     |     | 105 |
| Tyr | Val | Ala | Leu | Asn | Met | Thr | Ser | Ala | Ser | Ser | Phe | Gln | Met | Leu |
|     |     |     |     | 110 |     |     |     |     | 115 |     |     |     |     | 120 |
| Arg | Gly | Ala | Val | Ile | Ile | Phe | Thr | Gly | Leu | Phe | Ser | Val | Ala | Phe |
|     |     |     |     | 125 |     |     |     |     | 130 |     |     |     |     | 135 |
| Leu | Gly | Arg | Arg | Leu | Val | Leu | Ser | Gln | Trp | Leu | Gly | Ile | Leu | Ala |
|     |     |     |     | 140 |     |     |     |     | 145 |     |     |     |     | 150 |
| Thr | Ile | Ala | Gly | Leu | Val | Val | Val | Gly | Leu | Ala | Asp | Leu | Leu | Ser |
|     |     |     |     | 155 |     |     |     |     | 160 |     |     |     |     | 165 |
| Lys | His | Asp | Ser | Gln | His | Lys | Leu | Ser | Glu | Val | Ile | Thr | Gly | Asp |
|     |     |     |     | 170 |     |     |     |     | 175 |     |     |     |     | 180 |
| Leu | Leu | Ile | Ile | Met | Ala | Gln | Ile | Ile | Val | Ala | Ile | Gln | Met | Val |
|     |     |     |     | 185 |     |     |     |     | 190 |     |     |     |     | 195 |
| Leu | Glu | Glu | Lys | Phe | Val | Tyr | Lys | His | Asn | Val | His | Pro | Leu | Arg |
|     |     |     |     | 200 |     |     |     |     | 205 |     |     |     |     | 210 |
| Ala | Val | Gly | Thr | Glu | Gly | Leu | Phe | Gly | Phe | Val | Ile | Leu | Ser | Leu |
|     |     |     |     | 215 |     |     |     |     | 220 |     |     |     |     | 225 |
| Leu | Leu | Val | Pro | Met | Tyr | Tyr | Ile | Pro | Ala | Gly | Ser | Phe | Ser | Gly |
|     |     |     |     | 230 |     |     |     |     | 235 |     |     |     |     | 240 |
| Asn | Pro | Arg | Gly | Thr | Leu | Glu | Asp | Ala | Leu | Asp | Ala | Phe | Cys | Gln |
|     |     |     |     | 245 |     |     |     |     | 250 |     |     |     |     | 255 |
| Val | Gly | Gln | Gln | Pro | Leu | Ile | Ala | Val | Ala | Leu | Leu | Gly | Asn | Ile |
|     |     |     |     | 260 |     |     |     |     | 265 |     |     |     |     | 270 |
| Ser | Ser | Ile | Ala | Phe | Asn | Phe | Ala | Gly | Ile | Ser | Val | Thr | Lys |     |
|     |     |     |     | 275 |     |     |     |     | 280 |     |     |     |     | 285 |
| Glu | Leu | Ser | Ala | Thr | Thr | Arg | Met | Val | Leu | Asp | Ser | Leu | Arg | Thr |
|     |     |     |     | 290 |     |     |     |     | 295 |     |     |     |     | 300 |
| Val | Val | Ile | Trp | Ala | Leu | Ser | Leu | Ala | Leu | Gly | Trp | Glu | Ala | Phe |
|     |     |     |     | 305 |     |     |     |     | 310 |     |     |     |     | 315 |
| His | Ala | Leu | Gln | Ile | Leu | Gly | Phe | Leu | Ile | Leu | Leu | Ile | Gly | Thr |
|     |     |     |     | 320 |     |     |     |     | 325 |     |     |     |     | 330 |
| Ala | Leu | Tyr | Asn | Gly | Leu | His | Arg | Pro | Leu | Leu | Gly | Arg | Leu | Ser |
|     |     |     |     | 335 |     |     |     |     | 340 |     |     |     |     | 345 |
| Arg | Gly | Arg | Pro | Leu | Ala | Glu | Glu | Ser | Glu | Gln | Glu | Arg | Leu | Leu |
|     |     |     |     | 350 |     |     |     |     | 355 |     |     |     |     | 360 |
| Gly | Gly | Thr | Arg | Thr | Pro | Ile | Asn | Asp | Ala | Ser |     |     |     |     |
|     |     |     |     | 365 |     |     |     |     | 370 |     |     |     |     |     |

&lt;210&gt; 15

&lt;211&gt; 374

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; misc\_feature

&lt;223&gt; Incyte ID No: 306263CD1

&lt;400&gt; 15

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Met | Ala | Tyr | Ile | Glu | Gln | Arg | Arg | Ile | Ser | His | Glu | Gly | Ser | Pro |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |
| Val | Lys | Pro | Val | Ala | Ile | Arg | Glu | Phe | Gln | Lys | Thr | Glu | Asp | Met |
|     |     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |
| Arg | Arg | Tyr | Leu | His | Gln | Asn | Arg | Val | Pro | Ala | Glu | Pro | Ser | Ser |

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|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
|     | 35  |     | 40  |     | 45  |     |     |     |     |     |     |     |     |     |
| Leu | Leu | Ser | Leu | Ser | Ala | Ser | His | Asn | Gln | Leu | Ser | His | Thr | Asp |
|     | 50  |     | 55  |     | 60  |     |     |     |     |     |     |     |     |     |
| Leu | Glu | Leu | His | Gln | Arg | Arg | Glu | Gln | Leu | Val | Glu | Arg | Thr | Arg |
|     | 65  |     | 70  |     | 75  |     |     |     |     |     |     |     |     |     |
| Arg | Glu | Ala | Gln | Leu | Ala | Ala | Leu | Gln | Tyr | Glu | Glu | Glu | Lys | Ile |
|     | 80  |     | 85  |     | 90  |     |     |     |     |     |     |     |     |     |
| Arg | Thr | Lys | Gln | Ile | Gln | Arg | Asp | Ala | Val | Leu | Asp | Phe | Val | Lys |
|     | 95  |     | 100 |     | 105 |     |     |     |     |     |     |     |     |     |
| Gln | Lys | Ala | Ser | Gln | Ser | Pro | Gln | Lys | Gln | His | Pro | Leu | Leu | Asp |
|     | 110 |     | 115 |     | 120 |     |     |     |     |     |     |     |     |     |
| Gly | Val | Asp | Gly | Glu | Cys | Pro | Phe | Pro | Ser | Arg | Arg | Ser | Gln | His |
|     | 125 |     | 130 |     | 135 |     |     |     |     |     |     |     |     |     |
| Thr | Asp | Asp | Ser | Ala | Leu | Cys | Met | Ser | Asp | Asp | Arg | Pro | Asn | Ala |
|     | 140 |     | 145 |     | 150 |     |     |     |     |     |     |     |     |     |
| Leu | Leu | Ser | Ser | Pro | Ala | Thr | Glu | Thr | Val | His | His | Ser | Pro | Ala |
|     | 155 |     | 160 |     | 165 |     |     |     |     |     |     |     |     |     |
| Tyr | Ser | Phe | Pro | Ala | Ala | Ile | Gln | Arg | Asn | Gln | Pro | Gln | Arg | Pro |
|     | 170 |     | 175 |     | 180 |     |     |     |     |     |     |     |     |     |
| Glu | Ser | Phe | Leu | Phe | Arg | Ala | Gly | Val | Arg | Ala | Glu | Thr | Asn | Lys |
|     | 185 |     | 190 |     | 195 |     |     |     |     |     |     |     |     |     |
| Gly | His | Ala | Ser | Pro | Leu | Pro | Pro | Ser | Ala | Ala | Pro | Thr | Thr | Asp |
|     | 200 |     | 205 |     | 210 |     |     |     |     |     |     |     |     |     |
| Ser | Thr | Asp | Ser | Ile | Thr | Gly | Gln | Asn | Ser | Arg | Gln | Arg | Glu | Glu |
|     | 215 |     | 220 |     | 225 |     |     |     |     |     |     |     |     |     |
| Glu | Leu | Glu | Leu | Ile | Asp | Gln | Leu | Arg | Lys | His | Ile | Glu | Tyr | Arg |
|     | 230 |     | 235 |     | 240 |     |     |     |     |     |     |     |     |     |
| Leu | Lys | Val | Ser | Leu | Pro | Cys | Asp | Leu | Gly | Ala | Ala | Leu | Thr | Asp |
|     | 245 |     | 250 |     | 255 |     |     |     |     |     |     |     |     |     |
| Gly | Val | Val | Leu | Cys | His | Leu | Ala | Asn | His | Val | Arg | Pro | Arg | Ser |
|     | 260 |     | 265 |     | 270 |     |     |     |     |     |     |     |     |     |
| Val | Pro | Ser | Ile | His | Val | Pro | Ser | Pro | Ala | Val | Pro | Lys | Leu | Thr |
|     | 275 |     | 280 |     | 285 |     |     |     |     |     |     |     |     |     |
| Met | Ala | Lys | Cys | Arg | Arg | Asn | Val | Glu | Asn | Phe | Leu | Glu | Ala | Cys |
|     | 290 |     | 295 |     | 300 |     |     |     |     |     |     |     |     |     |
| Arg | Lys | Ile | Gly | Val | Pro | Gln | Asp | Asn | Leu | Cys | Ser | Pro | Ser | Asp |
|     | 305 |     | 310 |     | 315 |     |     |     |     |     |     |     |     |     |
| Ile | Leu | Gln | Leu | Asn | Leu | Ser | Val | Lys | Arg | Thr | Val | Glu | Thr | Leu |
|     | 320 |     | 325 |     | 330 |     |     |     |     |     |     |     |     |     |
| Leu | Ser | Leu | Gly | Ala | His | Ser | Glu | Glu | Ser | Ser | Phe | Val | Cys | Leu |
|     | 335 |     | 340 |     | 345 |     |     |     |     |     |     |     |     |     |
| Ser | Leu | Gln | Leu | Leu | Gly | Phe | Val | Ala | Phe | Tyr | Cys | Thr | Val | Met |
|     | 350 |     | 355 |     | 360 |     |     |     |     |     |     |     |     |     |
| Leu | Thr | Leu | Cys | Val | Leu | Tyr | Tyr | Trp | Leu | Phe | Pro | Ala | Arg |     |
|     | 365 |     | 370 |     |     |     |     |     |     |     |     |     |     |     |

&lt;210&gt; 16

&lt;211&gt; 183

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; misc\_feature

&lt;223&gt; Incyte ID No: 483751CD1

&lt;400&gt; 16

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Met | Glu | Asn | Gly | Ala | Val | Tyr | Ser | Pro | Thr | Thr | Glu | Glu | Asp | Pro |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |
| Gly | Pro | Ala | Arg | Gly | Pro | Arg | Ser | Gly | Leu | Ala | Ala | Tyr | Phe | Phe |
|     |     |     | 20  |     |     |     |     |     | 25  |     |     |     |     | 30  |
| Met | Gly | Arg | Leu | Pro | Leu | Leu | Arg | Arg | Val | Leu | Lys | Gly | Leu | Gln |
|     |     |     | 35  |     |     |     |     |     | 40  |     |     |     |     | 45  |

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|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Leu | Leu | Leu | Ser | Leu | Leu | Ala | Phe | Ile | Cys | Glu | Glu | Val | Val | Ser |
|     |     |     |     | 50  |     |     |     |     | 55  |     |     |     |     | 60  |
| Gln | Cys | Thr | Leu | Cys | Gly | Gly | Leu | Tyr | Phe | Phe | Glu | Phe | Val | Ser |
|     |     |     |     | 65  |     |     |     |     | 70  |     |     |     |     | 75  |
| Cys | Ser | Ala | Phe | Leu | Leu | Ser | Leu | Leu | Ile | Leu | Ile | Val | Tyr | Cys |
|     |     |     |     | 80  |     |     |     |     | 85  |     |     |     |     | 90  |
| Thr | Pro | Phe | Tyr | Glu | Arg | Val | Asp | Thr | Thr | Lys | Val | Lys | Ser | Ser |
|     |     |     |     | 95  |     |     |     |     | 100 |     |     |     |     | 105 |
| Asp | Phe | Tyr | Ile | Thr | Leu | Gly | Thr | Gly | Cys | Val | Phe | Leu | Leu | Ala |
|     |     |     |     | 110 |     |     |     |     | 115 |     |     |     |     | 120 |
| Ser | Ile | Ile | Phe | Val | Ser | Thr | His | Asp | Arg | Thr | Ser | Ala | Glu | Ile |
|     |     |     |     | 125 |     |     |     |     | 130 |     |     |     |     | 135 |
| Ala | Ala | Ile | Val | Phe | Gly | Phe | Ile | Ala | Ser | Phe | Met | Phe | Leu | Leu |
|     |     |     |     | 140 |     |     |     |     | 145 |     |     |     |     | 150 |
| Asp | Phe | Ile | Thr | Met | Leu | Tyr | Glu | Lys | Arg | Gln | Glu | Ser | Gln | Leu |
|     |     |     |     | 155 |     |     |     |     | 160 |     |     |     |     | 165 |
| Arg | Lys | Pro | Glu | Asn | Thr | Thr | Arg | Ala | Glu | Ala | Leu | Thr | Glu | Pro |
|     |     |     |     | 170 |     |     |     |     | 175 |     |     |     |     | 180 |

Leu Asn Ala

&lt;210&gt; 17

&lt;211&gt; 190

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; misc\_feature

&lt;223&gt; Incyte ID No: 727332CD1

&lt;400&gt; 17

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Met | Asp | Thr | Thr | Pro | Leu | Ile | Thr | Glu | His | Val | Ile | Asn | Thr | Thr |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |
| Gln | Asp | Pro | Cys | Ser | Trp | Val | Asp | Lys | Leu | Ser | Thr | Val | His | His |
|     |     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |
| Arg | Ile | Val | Gly | Cys | Ser | Leu | Ala | Val | Ile | Ser | Gly | Val | Leu | Tyr |
|     |     |     |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |
| Gly | Ser | Thr | Phe | Val | Pro | Ile | Ile | Tyr | Ile | Lys | Asp | His | Ser | Lys |
|     |     |     |     | 50  |     |     |     |     | 55  |     |     |     |     | 60  |
| Arg | Asn | Asp | Ser | Ile | Tyr | Ala | Gly | Ala | Ser | Gln | Tyr | Asp | Leu | Asp |
|     |     |     |     | 65  |     |     |     |     | 70  |     |     |     |     | 75  |
| Tyr | Val | Phe | Ala | His | Phe | Ser | Gly | Ile | Phe | Leu | Thr | Ser | Thr | Val |
|     |     |     |     | 80  |     |     |     |     | 85  |     |     |     |     | 90  |
| Tyr | Phe | Leu | Ala | Tyr | Cys | Ile | Ala | Met | Lys | Asn | Ser | Pro | Lys | Leu |
|     |     |     |     | 95  |     |     |     |     | 100 |     |     |     |     | 105 |
| Tyr | Pro | Glu | Ala | Val | Leu | Pro | Gly | Phe | Leu | Ser | Gly | Val | Leu | Trp |
|     |     |     |     | 110 |     |     |     |     | 115 |     |     |     |     | 120 |
| Ala | Ile | Ala | Thr | Cys | Cys | Trp | Phe | Ile | Ala | Asn | His | Ser | Leu | Ser |
|     |     |     |     | 125 |     |     |     |     | 130 |     |     |     |     | 135 |
| Ala | Val | Val | Ser | Phe | Pro | Ile | Ile | Thr | Ala | Gly | Pro | Gly | Phe | Ile |
|     |     |     |     | 140 |     |     |     |     | 145 |     |     |     |     | 150 |
| Ala | Ala | Met | Trp | Gly | Ile | Phe | Met | Phe | Lys | Glu | Ile | Lys | Gly | Leu |
|     |     |     |     | 155 |     |     |     |     | 160 |     |     |     |     | 165 |
| Gln | Asn | Tyr | Leu | Leu | Met | Ile | Leu | Ala | Phe | Cys | Ile | Ile | Leu | Thr |
|     |     |     |     | 170 |     |     |     |     | 175 |     |     |     |     | 180 |
| Gly | Ala | Leu | Cys | Thr | Ala | Phe | Ser | Lys | Ile |     |     |     |     |     |
|     |     |     |     | 185 |     |     |     |     | 190 |     |     |     |     |     |

&lt;210&gt; 18

&lt;211&gt; 361

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

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&lt;220&gt;

&lt;221&gt; misc\_feature

&lt;223&gt; Incyte ID No: 778800CD1

&lt;400&gt; 18

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Met | Leu | Ala | Arg | Arg | Leu | Val | Trp | Ala | Leu | Ile | Ser | Glu | Ala | Thr |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |
| Lys | Ala | Gly | Ala | Ala | Ser | Met | Ile | His | Tyr | Met | Val | Leu | Ile | Ser |
|     |     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |
| Ala | Arg | Leu | Val | Leu | Leu | Thr | Leu | Cys | Gly | Trp | Val | Leu | Cys | Trp |
|     |     |     |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |
| Thr | Leu | Val | Asn | Leu | Phe | Arg | Ser | His | Ser | Val | Leu | Asn | Leu | Leu |
|     |     |     |     | 50  |     |     |     |     | 55  |     |     |     |     | 60  |
| Phe | Leu | Gly | Tyr | Pro | Phe | Gly | Val | Tyr | Val | Pro | Leu | Cys | Cys | Phe |
|     |     |     |     | 65  |     |     |     |     | 70  |     |     |     |     | 75  |
| His | Gln | Asp | Ser | Arg | Ala | His | Leu | Leu | Leu | Thr | Asp | Tyr | Asn | Tyr |
|     |     |     |     | 80  |     |     |     |     | 85  |     |     |     |     | 90  |
| Val | Val | Gln | His | Glu | Ala | Val | Glu | Glu | Ser | Ala | Ser | Thr | Val | Gly |
|     |     |     |     | 95  |     |     |     |     | 100 |     |     |     |     | 105 |
| Gly | Leu | Ala | Lys | Ser | Lys | Asp | Phe | Leu | Ser | Leu | Leu | Leu | Glu | Ser |
|     |     |     |     | 110 |     |     |     |     | 115 |     |     |     |     | 120 |
| Leu | Lys | Glu | Gln | Phe | Asn | Asn | Ala | Thr | Pro | Ile | Pro | Thr | His | Ser |
|     |     |     |     | 125 |     |     |     |     | 130 |     |     |     |     | 135 |
| Cys | Pro | Leu | Ser | Pro | Asp | Leu | Ile | Arg | Asn | Glu | Val | Glu | Cys | Leu |
|     |     |     |     | 140 |     |     |     |     | 145 |     |     |     |     | 150 |
| Lys | Ala | Asp | Phe | Asn | His | Arg | Ile | Lys | Glu | Val | Leu | Phe | Asn | Ser |
|     |     |     |     | 155 |     |     |     |     | 160 |     |     |     |     | 165 |
| Leu | Phe | Ser | Ala | Tyr | Tyr | Val | Ala | Phe | Leu | Pro | Leu | Cys | Phe | Val |
|     |     |     |     | 170 |     |     |     |     | 175 |     |     |     |     | 180 |
| Lys | Ser | Thr | Gln | Tyr | Tyr | Asp | Met | Arg | Trp | Ser | Cys | Glu | His | Leu |
|     |     |     |     | 185 |     |     |     |     | 190 |     |     |     |     | 195 |
| Ile | Met | Val | Trp | Ile | Asn | Ala | Phe | Val | Met | Leu | Thr | Thr | Gln | Leu |
|     |     |     |     | 200 |     |     |     |     | 205 |     |     |     |     | 210 |
| Leu | Pro | Ser | Lys | Tyr | Cys | Asp | Leu | Leu | His | Lys | Ser | Ala | Ala | His |
|     |     |     |     | 215 |     |     |     |     | 220 |     |     |     |     | 225 |
| Leu | Gly | Lys | Trp | Gln | Lys | Leu | Glu | His | Gly | Ser | Tyr | Ser | Asn | Ala |
|     |     |     |     | 230 |     |     |     |     | 235 |     |     |     |     | 240 |
| Pro | Gln | His | Ile | Trp | Ser | Glu | Asn | Thr | Ile | Trp | Pro | Gln | Gly | Val |
|     |     |     |     | 245 |     |     |     |     | 250 |     |     |     |     | 255 |
| Leu | Val | Arg | His | Ser | Arg | Cys | Leu | Tyr | Arg | Ala | Met | Gly | Pro | Tyr |
|     |     |     |     | 260 |     |     |     |     | 265 |     |     |     |     | 270 |
| Asn | Val | Ala | Val | Pro | Ser | Asp | Val | Ser | His | Ala | Arg | Phe | Tyr | Phe |
|     |     |     |     | 275 |     |     |     |     | 280 |     |     |     |     | 285 |
| Leu | Phe | His | Arg | Pro | Leu | Arg | Leu | Leu | Asn | Leu | Leu | Ile | Leu | Ile |
|     |     |     |     | 290 |     |     |     |     | 295 |     |     |     |     | 300 |
| Glu | Gly | Ser | Val | Val | Phe | Tyr | Gln | Leu | Tyr | Ser | Leu | Leu | Arg | Ser |
|     |     |     |     | 305 |     |     |     |     | 310 |     |     |     |     | 315 |
| Glu | Lys | Trp | Asn | His | Thr | Leu | Ser | Met | Ala | Leu | Ile | Leu | Phe | Cys |
|     |     |     |     | 320 |     |     |     |     | 325 |     |     |     |     | 330 |
| Asn | Tyr | Tyr | Val | Leu | Phe | Lys | Leu | Leu | Arg | Asp | Arg | Ile | Val | Leu |
|     |     |     |     | 335 |     |     |     |     | 340 |     |     |     |     | 345 |
| Gly | Arg | Ala | Tyr | Ser | Tyr | Pro | Leu | Asn | Ser | Tyr | Glu | Leu | Lys | Thr |
|     |     |     |     | 350 |     |     |     |     | 355 |     |     |     |     | 360 |

Asn

&lt;210&gt; 19

&lt;211&gt; 97

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;



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&lt;221&gt; misc\_feature

&lt;223&gt; Incyte ID No: 1396995CD1

&lt;400&gt; 19

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Met | Glu | Asp | His | Ile | Ile | Ser | Cys | Tyr | Leu | Lys | Trp | Pro | Val | Cys |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |
| Ala | Gln | Leu | Leu | Asn | Cys | Ser | Glu | Pro | Thr | Glu | Arg | Ala | Thr | Val |
|     |     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |
| Glu | Thr | Cys | Met | Val | Ser | Arg | Ile | His | Arg | His | Ala | Leu | Phe | Leu |
|     |     |     |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |
| Cys | Leu | Leu | Pro | Gln | Cys | Tyr | Leu | Pro | Lys | Asp | Leu | Trp | Tyr | Ser |
|     |     |     |     | 50  |     |     |     |     | 55  |     |     |     |     | 60  |
| Ser | Leu | Ser | Trp | Glu | Arg | Asn | Ser | Ile | Leu | Phe | Ser | Leu | Leu | Leu |
|     |     |     |     | 65  |     |     |     |     | 70  |     |     |     |     | 75  |
| Leu | Tyr | Ser | Leu | Phe | Tyr | Ser | Tyr | Ala | Pro | Ile | Val | Ala | Lys | Gly |
|     |     |     |     | 80  |     |     |     |     | 85  |     |     |     |     | 90  |
| Lys | Arg | Gly | Lys | Met | Ile | Val |     |     |     |     |     |     |     |     |
|     |     |     |     | 95  |     |     |     |     |     |     |     |     |     |     |

&lt;210&gt; 20

&lt;211&gt; 232

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; misc\_feature

&lt;223&gt; Incyte ID No: 1597730CD1

&lt;400&gt; 20

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Met | Gly | Pro | Leu | Ala | Leu | Pro | Ala | Trp | Leu | Gln | Pro | Arg | Tyr | Arg |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |
| Lys | Asn | Ala | Tyr | Leu | Phe | Ile | Tyr | Tyr | Leu | Ile | Gln | Phe | Cys | Gly |
|     |     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |
| His | Ser | Trp | Ile | Phe | Thr | Asn | Met | Thr | Val | Arg | Phe | Phe | Ser | Phe |
|     |     |     |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |
| Gly | Lys | Asp | Ser | Met | Val | Asp | Thr | Phe | Tyr | Ala | Ile | Gly | Leu | Val |
|     |     |     |     | 50  |     |     |     |     | 55  |     |     |     |     | 60  |
| Met | Arg | Leu | Cys | Gln | Ser | Val | Ser | Leu | Leu | Glu | Leu | Leu | His | Ile |
|     |     |     |     | 65  |     |     |     |     | 70  |     |     |     |     | 75  |
| Tyr | Val | Gly | Ile | Glu | Ser | Asn | His | Leu | Leu | Pro | Arg | Phe | Leu | Gln |
|     |     |     |     | 80  |     |     |     |     | 85  |     |     |     |     | 90  |
| Leu | Thr | Glu | Arg | Ile | Ile | Ile | Leu | Phe | Val | Val | Ile | Thr | Ser | Gln |
|     |     |     |     | 95  |     |     |     |     | 100 |     |     |     |     | 105 |
| Glu | Glu | Val | Gln | Glu | Lys | Tyr | Val | Val | Cys | Val | Leu | Phe | Val | Phe |
|     |     |     |     | 110 |     |     |     |     | 115 |     |     |     |     | 120 |
| Trp | Asn | Leu | Leu | Asp | Met | Val | Arg | Tyr | Thr | Tyr | Ser | Met | Leu | Ser |
|     |     |     |     | 125 |     |     |     |     | 130 |     |     |     |     | 135 |
| Val | Ile | Gly | Ile | Ser | Tyr | Ala | Val | Leu | Thr | Trp | Leu | Ser | Gln | Thr |
|     |     |     |     | 140 |     |     |     |     | 145 |     |     |     |     | 150 |
| Leu | Trp | Met | Pro | Ile | Tyr | Pro | Leu | Cys | Val | Leu | Ala | Glu | Ala | Phe |
|     |     |     |     | 155 |     |     |     |     | 160 |     |     |     |     | 165 |
| Ala | Ile | Tyr | Gln | Ser | Leu | Pro | Tyr | Phe | Glu | Ser | Phe | Gly | Thr | Tyr |
|     |     |     |     | 170 |     |     |     |     | 175 |     |     |     |     | 180 |
| Ser | Thr | Lys | Leu | Pro | Phe | Asp | Leu | Ser | Ile | Tyr | Phe | Pro | Tyr | Val |
|     |     |     |     | 185 |     |     |     |     | 190 |     |     |     |     | 195 |
| Leu | Lys | Ile | Tyr | Leu | Met | Met | Leu | Phe | Ile | Gly | Met | Tyr | Phe | Thr |
|     |     |     |     | 200 |     |     |     |     | 205 |     |     |     |     | 210 |
| Tyr | Ser | His | Leu | Tyr | Ser | Glu | Arg | Arg | Asp | Ile | Leu | Gly | Ile | Phe |
|     |     |     |     | 215 |     |     |     |     | 220 |     |     |     |     | 225 |
| Pro | Ile | Lys | Lys | Lys | Lys | Met |     |     |     |     |     |     |     |     |
|     |     |     |     | 230 |     |     |     |     |     |     |     |     |     |     |

&lt;210&gt; 21

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&lt;211&gt; 271

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; misc\_feature

&lt;223&gt; Incyte ID No: 1629304CD1

&lt;400&gt; 21

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Met | Thr | Ala | Trp | Ile | Leu | Leu | Pro | Val | Ser | Leu | Ser | Ala | Phe | Ser |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |
| Ile | Thr | Gly | Ile | Trp | Thr | Val | Tyr | Ala | Met | Ala | Val | Met | Asn | His |
|     |     |     | 20  |     |     |     |     |     | 25  |     |     |     |     | 30  |
| His | Val | Cys | Pro | Val | Glu | Asn | Trp | Ser | Tyr | Asn | Glu | Ser | Cys | Pro |
|     |     |     | 35  |     |     |     |     |     | 40  |     |     |     |     | 45  |
| Pro | Asp | Pro | Ala | Glu | Gln | Gly | Gly | Pro | Lys | Thr | Cys | Cys | Thr | Leu |
|     |     |     | 50  |     |     |     |     |     | 55  |     |     |     |     | 60  |
| Asp | Asp | Val | Pro | Leu | Ile | Ser | Lys | Cys | Gly | Ser | Tyr | Pro | Pro | Glu |
|     |     |     | 65  |     |     |     |     |     | 70  |     |     |     |     | 75  |
| Ser | Cys | Leu | Phe | Ser | Leu | Ile | Gly | Asn | Met | Gly | Ala | Phe | Met | Val |
|     |     |     | 80  |     |     |     |     |     | 85  |     |     |     |     | 90  |
| Ala | Leu | Ile | Cys | Leu | Leu | Arg | Tyr | Gly | Gln | Leu | Leu | Glu | Gln | Ser |
|     |     |     | 95  |     |     |     |     |     | 100 |     |     |     |     | 105 |
| Arg | His | Ser | Trp | Val | Asn | Thr | Thr | Ala | Leu | Ile | Thr | Gly | Cys | Thr |
|     |     |     | 110 |     |     |     |     |     | 115 |     |     |     |     | 120 |
| Asn | Ala | Ala | Gly | Leu | Leu | Val | Val | Gly | Asn | Phe | Gln | Val | Asp | His |
|     |     |     | 125 |     |     |     |     |     | 130 |     |     |     |     | 135 |
| Ala | Arg | Ser | Leu | His | Tyr | Val | Gly | Ala | Gly | Val | Ala | Phe | Pro | Ala |
|     |     |     | 140 |     |     |     |     |     | 145 |     |     |     |     | 150 |
| Gly | Leu | Leu | Phe | Val | Cys | Leu | His | Cys | Ala | Leu | Ser | Tyr | Gln | Gly |
|     |     |     | 155 |     |     |     |     |     | 160 |     |     |     |     | 165 |
| Ala | Thr | Ala | Pro | Leu | Asp | Leu | Ala | Val | Ala | Tyr | Leu | Arg | Ser | Val |
|     |     |     | 170 |     |     |     |     |     | 175 |     |     |     |     | 180 |
| Leu | Ala | Val | Ile | Ala | Phe | Ile | Thr | Leu | Val | Leu | Ser | Gly | Val | Phe |
|     |     |     | 185 |     |     |     |     |     | 190 |     |     |     |     | 195 |
| Phe | Val | His | Glu | Ser | Ser | Gln | Leu | Gln | His | Gly | Ala | Ala | Leu | Cys |
|     |     |     | 200 |     |     |     |     |     | 205 |     |     |     |     | 210 |
| Glu | Trp | Val | Cys | Val | Ile | Asp | Ile | Leu | Ile | Phe | Tyr | Gly | Thr | Phe |
|     |     |     | 215 |     |     |     |     |     | 220 |     |     |     |     | 225 |
| Ser | Tyr | Glu | Phe | Gly | Ala | Val | Ser | Ser | Asp | Thr | Leu | Val | Ala | Ala |
|     |     |     | 230 |     |     |     |     |     | 235 |     |     |     |     | 240 |
| Leu | Gln | Pro | Thr | Pro | Gly | Arg | Ala | Cys | Lys | Ser | Ser | Gly | Ser | Ser |
|     |     |     | 245 |     |     |     |     |     | 250 |     |     |     |     | 255 |
| Ser | Thr | Ser | Thr | His | Leu | Asn | Cys | Ala | Pro | Glu | Ser | Ile | Ala | Met |
|     |     |     | 260 |     |     |     |     |     | 265 |     |     |     |     | 270 |

Ile

&lt;210&gt; 22

&lt;211&gt; 267

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; misc\_feature

&lt;223&gt; Incyte ID No: 1989585CD1

&lt;400&gt; 22

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Met | Ala | Pro | Ala | Ala | Asp | Arg | Glu | Gly | Tyr | Trp | Gly | Pro | Thr | Thr |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |
| Ser | Thr | Leu | Asp | Trp | Cys | Glu | Glu | Asn | Tyr | Ser | Val | Thr | Trp | Tyr |
|     |     |     | 20  |     |     |     |     |     | 25  |     |     |     |     | 30  |



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| Thr | Asp | Gln | Ala | Gln | Ser | His | Gln | Phe | Pro | Tyr | Val | Met | Gln | Gly | 140 | 145 | 150 |
| Asn | Val | Asp | Asn | Gln | Phe | Pro | Gly | Gln | Ala | Ala | Pro | Pro | Gly | Phe | 155 | 160 | 165 |
| Pro | Val | Tyr | Pro | Ala | Phe | Ser | Pro | Leu | Gln | Met | Leu | Trp | Trp | Gln | 170 | 175 | 180 |
| Gln | Met | Tyr | Ala | His | Gln | Tyr | Tyr | Met | Gln | Tyr | Gln | Ala | Ala | Val | 185 | 190 | 195 |
| Ser | Ala | Gln | Ala | Thr | Ser | Asn | Val | Asn | Pro | Thr | Gln | Pro | Thr | Thr | 200 | 205 | 210 |
| Ser | Gln | Pro | Leu | Asn | Leu | Ala | His | Val | Pro | Gly | Glu | Glu | Pro | Pro | 215 | 220 | 225 |
| Pro | Ala | Pro | Asn | Leu | Val | Ala | Gln | Glu | Asn | Arg | Pro | Met | Asn | Glu | 230 | 235 | 240 |
| Asn | Val | Gln | Met | Asn | Ala | Gln | Gly | Gly | Pro | Val | Leu | Asn | Glu | Glu | 245 | 250 | 255 |
| Asp | Phe | Asn | Arg | Asp | Trp | Leu | Asp | Trp | Met | Tyr | Thr | Phe | Ser | Arg | 260 | 265 | 270 |
| Ala | Ala | Ile | Leu | Leu | Ser | Ile | Val | Tyr | Phe | Tyr | Ser | Ser | Phe | Ser | 275 | 280 | 285 |
| Arg | Phe | Ile | Met | Val | Met | Gly | Ala | Met | Leu | Leu | Val | Tyr | Leu | His | 290 | 295 | 300 |
| Gln | Ala | Gly | Trp | Phe | Pro | Phe | Arg | Gln | Glu | Gly | Gly | His | Gln | Gln | 305 | 310 | 315 |
| Ala | Pro | Asn | Asn | Asn | Ala | Glu | Val | Asn | Asn | Asp | Gly | Gln | Asn | Ala | 320 | 325 | 330 |
| Asn | Asn | Leu | Glu | Leu | Glu | Glu | Met | Glu | Arg | Leu | Met | Asp | Asp | Gly | 335 | 340 | 345 |
| Leu | Glu | Asp | Glu | Ser | Gly | Glu | Asp | Gly | Gly | Glu | Asp | Ala | Ser | Ala | 350 | 355 | 360 |
| Ile | Gln | Arg | Pro | Gly | Leu | Met | Ala | Ser | Ala | Trp | Ser | Phe | Ile | Thr | 365 | 370 | 375 |
| Thr | Phe | Phe | Thr | Ser | Leu | Ile | Pro | Glu | Gly | Pro | Pro | Gln | Val | Ala | 380 | 385 | 390 |
| Asn |     |     |     |     |     |     |     |     |     |     |     |     |     |     | 395 | 400 | 405 |

<210> 24  
 <211> 318  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> misc\_feature  
 <223> Incyte ID No: 2299506CD1

<400> 24

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Met | Leu | Ser | Glu | Ser | Ser | Ser | Phe | Leu | Lys | Gly | Val | Met | Leu | Gly | 1   | 5   | 10  | 15  |
| Ser | Ile | Phe | Cys | Ala | Leu | Ile | Thr | Met | Leu | Gly | His | Ile | Arg | Ile | 20  | 25  | 30  | 35  |
| Gly | His | Gly | Asn | Arg | Met | His | His | His | Glu | His | His | His | Leu | Gln | 40  | 45  | 50  | 55  |
| Ala | Pro | Asn | Lys | Glu | Asp | Ile | Leu | Lys | Ile | Ser | Glu | Asp | Glu | Arg | 60  | 65  | 70  | 75  |
| Met | Glu | Leu | Ser | Lys | Ser | Phe | Arg | Val | Tyr | Cys | Ile | Ile | Leu | Val | 80  | 85  | 90  | 95  |
| Lys | Pro | Lys | Asp | Val | Ser | Leu | Trp | Ala | Ala | Val | Lys | Glu | Thr | Trp | 100 | 105 | 110 | 115 |
| Thr | Lys | His | Cys | Asp | Lys | Ala | Glu | Phe | Phe | Ser | Ser | Glu | Asn | Val | 120 | 125 | 130 | 135 |

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|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |  |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|--|
| Lys | Val | Phe | Glu | Ser | Ile | Asn | Met | Asp | Thr | Asn | Asp | Met | Trp | Leu |  |
|     |     |     |     | 110 |     |     |     |     | 115 |     |     |     |     | 120 |  |
| Met | Met | Arg | Lys | Ala | Tyr | Lys | Tyr | Ala | Phe | Asp | Lys | Tyr | Arg | Asp |  |
|     |     |     |     | 125 |     |     |     |     | 130 |     |     |     |     | 135 |  |
| Gln | Tyr | Asn | Trp | Phe | Phe | Leu | Ala | Arg | Pro | Thr | Thr | Phe | Ala | Ile |  |
|     |     |     |     | 140 |     |     |     |     | 145 |     |     |     |     | 150 |  |
| Ile | Glu | Asn | Leu | Lys | Tyr | Phe | Leu | Leu | Lys | Lys | Asp | Pro | Ser | Gln |  |
|     |     |     |     | 155 |     |     |     |     | 160 |     |     |     |     | 165 |  |
| Pro | Phe | Tyr | Leu | Gly | His | Thr | Ile | Lys | Ser | Gly | Asp | Leu | Glu | Tyr |  |
|     |     |     |     | 170 |     |     |     |     | 175 |     |     |     |     | 180 |  |
| Val | Gly | Met | Glu | Gly | Gly | Ile | Val | Leu | Ser | Val | Glu | Ser | Met | Lys |  |
|     |     |     |     | 185 |     |     |     |     | 190 |     |     |     |     | 195 |  |
| Arg | Leu | Asn | Ser | Leu | Leu | Asn | Ile | Pro | Glu | Lys | Cys | Pro | Glu | Gln |  |
|     |     |     |     | 200 |     |     |     |     | 205 |     |     |     |     | 210 |  |
| Gly | Gly | Met | Ile | Trp | Lys | Ile | Ser | Glu | Asp | Lys | Gln | Leu | Ala | Val |  |
|     |     |     |     | 215 |     |     |     |     | 220 |     |     |     |     | 225 |  |
| Cys | Leu | Lys | Tyr | Ala | Gly | Val | Phe | Ala | Glu | Asn | Ala | Glu | Asp | Ala |  |
|     |     |     |     | 230 |     |     |     |     | 235 |     |     |     |     | 240 |  |
| Asp | Gly | Lys | Asp | Val | Phe | Asn | Thr | Lys | Ser | Val | Gly | Leu | Ser | Ile |  |
|     |     |     |     | 245 |     |     |     |     | 250 |     |     |     |     | 255 |  |
| Lys | Glu | Ala | Met | Thr | Tyr | His | Pro | Asn | Gln | Val | Val | Glu | Gly | Cys |  |
|     |     |     |     | 260 |     |     |     |     | 265 |     |     |     |     | 270 |  |
| Cys | Ser | Asp | Met | Ala | Val | Thr | Phe | Asn | Gly | Leu | Thr | Pro | Asn | Gln |  |
|     |     |     |     | 275 |     |     |     |     | 280 |     |     |     |     | 285 |  |
| Met | His | Val | Met | Met | Tyr | Gly | Val | Tyr | Arg | Leu | Arg | Ala | Phe | Gly |  |
|     |     |     |     | 290 |     |     |     |     | 295 |     |     |     |     | 300 |  |
| His | Ile | Phe | Asn | Asp | Ala | Leu | Val | Phe | Leu | Pro | Pro | Asn | Gly | Ser |  |
|     |     |     |     | 305 |     |     |     |     | 310 |     |     |     |     | 315 |  |

Asp Asn Asp

&lt;210&gt; 25

&lt;211&gt; 326

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; misc\_feature

&lt;223&gt; Incyte ID No: 2506558CD1

&lt;400&gt; 25

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |  |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|--|
| Met | Glu | Phe | Leu | Trp | Asp | Phe | Leu | Asn | His | Gln | Glu | Gly | Pro | Arg |  |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |  |
| Ile | Arg | Asp | His | Leu | Ser | His | Gly | Glu | Ile | Asn | Leu | His | Glu | Phe |  |
|     |     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |  |
| Ser | Lys | Glu | Thr | Thr | Asn | Gln | Leu | Leu | Ala | Phe | Ser | Leu | Val | Leu |  |
|     |     |     |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |  |
| Leu | Leu | Arg | Phe | Val | Asp | Asp | Cys | Leu | Leu | Ser | Val | Phe | Lys | Glu |  |
|     |     |     |     | 50  |     |     |     |     | 55  |     |     |     |     | 60  |  |
| Lys | Ser | Ala | Val | Glu | Leu | Leu | Ile | Ser | Leu | Ala | Glu | Gly | Tyr | Ser |  |
|     |     |     |     | 65  |     |     |     |     | 70  |     |     |     |     | 75  |  |
| Ser | Arg | Cys | His | Pro | Val | Phe | Gln | Leu | Lys | Lys | Gln | Val | Leu | Ser |  |
|     |     |     |     | 80  |     |     |     |     | 85  |     |     |     |     | 90  |  |
| Cys | Glu | Glu | Ser | Ile | Arg | Val | Trp | Ala | Leu | Leu | Pro | Phe | Pro | Glu |  |
|     |     |     |     | 95  |     |     |     |     | 100 |     |     |     |     | 105 |  |
| Glu | Leu | Thr | Arg | Gln | Ala | Val | Arg | Leu | Glu | Asp | Asn | Ser | Glu | Thr |  |
|     |     |     |     | 110 |     |     |     |     | 115 |     |     |     |     | 120 |  |
| Asn | Ala | Cys | His | Ser | Leu | Ile | Thr | Lys | Met | Thr | Asp | Glu | Leu | Tyr |  |
|     |     |     |     | 125 |     |     |     |     | 130 |     |     |     |     | 135 |  |
| His | His | Met | Pro | Glu | Asn | Arg | Cys | Val | Leu | Lys | Asp | Leu | Asp | Arg |  |
|     |     |     |     | 140 |     |     |     |     | 145 |     |     |     |     | 150 |  |
| Leu | Pro | Thr | Glu | Thr | Trp | Pro | Gln | Leu | Leu | Arg | Glu | Leu | Cys | Ser |  |

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|                 |                     |                         |     |  |     |
|-----------------|---------------------|-------------------------|-----|--|-----|
|                 | 155                 |                         | 160 |  | 165 |
| Thr Pro Val Pro | Thr Leu Phe Cys Pro | Arg Ile Val Leu Glu Val |     |  |     |
|                 | 170                 |                         | 175 |  | 180 |
| Leu Val Val Leu | Arg Ser Ile Gly Glu | Gln Cys Arg Arg Val Ser |     |  |     |
|                 | 185                 |                         | 190 |  | 195 |
| Ser Gln Val Thr | Val Ala Ser Glu Leu | Arg His Arg Gln Trp Val |     |  |     |
|                 | 200                 |                         | 205 |  | 210 |
| Glu Arg Thr Leu | Arg Ser Arg Gln Arg | Gln Asn Tyr Leu Arg Met |     |  |     |
|                 | 215                 |                         | 220 |  | 225 |
| Trp Ser Ser Ile | Arg Leu Leu Ser Pro | Val Leu Ser Leu Ile Leu |     |  |     |
|                 | 230                 |                         | 235 |  | 240 |
| Leu Leu Ile Ala | Leu Glu Leu Val Asn | Ile His Ala Val Cys Gly |     |  |     |
|                 | 245                 |                         | 250 |  | 255 |
| Lys Asn Ala His | Glu Tyr Gln Gln Tyr | Leu Lys Phe Val Lys Ser |     |  |     |
|                 | 260                 |                         | 265 |  | 270 |
| Ile Leu Gln Tyr | Thr Glu Asn Leu Val | Ala Tyr Thr Ser Tyr Glu |     |  |     |
|                 | 275                 |                         | 280 |  | 285 |
| Lys Asn Lys Trp | Asn Glu Thr Ile Asn | Leu Thr His Thr Ala Leu |     |  |     |
|                 | 290                 |                         | 295 |  | 300 |
| Leu Lys Met Trp | Thr Phe Ser Glu Lys | Lys Gln Met Leu Ile His |     |  |     |
|                 | 305                 |                         | 310 |  | 315 |
| Leu Ala Lys Lys | Ser Thr Ser Lys Val | Leu Leu                 |     |  |     |
|                 | 320                 |                         | 325 |  |     |

&lt;210&gt; 26

&lt;211&gt; 247

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; misc\_feature

&lt;223&gt; Incyte ID No: 2546025CD1

&lt;400&gt; 26

|                     |                 |                         |  |  |     |
|---------------------|-----------------|-------------------------|--|--|-----|
| Met Leu Arg Phe Ile | Gln Lys Phe Ser | Gln Ala Ser Ser Lys Ile |  |  |     |
| 1                   | 5               | 10                      |  |  | 15  |
| Leu Lys Tyr Ser Phe | Pro Val Gly Leu | Arg Thr Ser Arg Thr Asp |  |  |     |
|                     | 20              | 25                      |  |  | 30  |
| Ile Leu Ser Leu Lys | Met Ser Leu Gln | Gln Asn Phe Ser Pro Cys |  |  |     |
|                     | 35              | 40                      |  |  | 45  |
| Pro Arg Pro Trp Leu | Ser Ser Ser Phe | Pro Ala Tyr Met Ser Lys |  |  |     |
|                     | 50              | 55                      |  |  | 60  |
| Thr Gln Cys Tyr His | Thr Ser Pro Cys | Ser Phe Lys Lys Gln Gln |  |  |     |
|                     | 65              | 70                      |  |  | 75  |
| Lys Gln Ala Leu Leu | Ala Arg Pro Ser | Ser Thr Ile Thr Tyr Leu |  |  |     |
|                     | 80              | 85                      |  |  | 90  |
| Thr Asp Ser Pro Lys | Pro Ala Leu Cys | Val Thr Leu Ala Gly Leu |  |  |     |
|                     | 95              | 100                     |  |  | 105 |
| Ile Pro Phe Val Ala | Pro Pro Leu Val | Met Leu Met Thr Lys Thr |  |  |     |
|                     | 110             | 115                     |  |  | 120 |
| Tyr Ile Pro Ile Leu | Ala Phe Thr Gln | Met Ala Tyr Gly Ala Ser |  |  |     |
|                     | 125             | 130                     |  |  | 135 |
| Phe Leu Ser Phe Leu | Gly Gly Ile Arg | Trp Gly Phe Ala Leu Pro |  |  |     |
|                     | 140             | 145                     |  |  | 150 |
| Glu Gly Ser Pro Ala | Lys Pro Asp Tyr | Leu Asn Leu Ala Ser Ser |  |  |     |
|                     | 155             | 160                     |  |  | 165 |
| Ala Ala Pro Leu Phe | Phe Ser Trp Phe | Ala Phe Leu Ile Ser Glu |  |  |     |
|                     | 170             | 175                     |  |  | 180 |
| Arg Leu Ser Glu Ala | Ile Val Thr Val | Ile Met Gly Met Gly Val |  |  |     |
|                     | 185             | 190                     |  |  | 195 |
| Ala Phe His Leu Glu | Leu Phe Leu Leu | Pro His Tyr Pro Asn Trp |  |  |     |
|                     | 200             | 205                     |  |  | 210 |

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|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Phe | Lys | Ala | Leu | Arg | Ile | Val | Val | Thr | Leu | Leu | Ala | Thr | Phe | Ser |
|     |     |     |     | 215 |     |     |     |     | 220 |     |     |     |     | 225 |
| Phe | Ile | Ile | Thr | Leu | Val | Val | Lys | Ser | Ser | Phe | Pro | Glu | Lys | Gly |
|     |     |     |     | 230 |     |     |     |     | 235 |     |     |     |     | 240 |
| His | Lys | Arg | Pro | Gly | Gln | Val |     |     |     |     |     |     |     |     |
|     |     |     |     | 245 |     |     |     |     |     |     |     |     |     |     |

&lt;210&gt; 27

&lt;211&gt; 278

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; misc\_feature

&lt;223&gt; Incyte ID No: 3145660CD1

&lt;400&gt; 27

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Met | Ala | Tyr | Phe | Tyr | Met | Cys | Asp | Arg | Ala | Asn | Leu | Phe | Met | Lys |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |
| Glu | Asn | Lys | Phe | Tyr | Thr | His | Ser | Ser | Phe | Phe | Ile | Pro | Ile | Ile |
|     |     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |
| Tyr | Ile | Leu | Val | Leu | Gly | Val | Phe | Tyr | Asn | Glu | Asn | Thr | Lys | Glu |
|     |     |     |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |
| Thr | Lys | Val | Leu | Asn | Arg | Glu | Gln | Thr | Asp | Glu | Trp | Lys | Gly | Trp |
|     |     |     |     | 50  |     |     |     |     | 55  |     |     |     |     | 60  |
| Met | Gln | Leu | Val | Ile | Leu | Ile | Tyr | His | Ile | Ser | Gly | Ala | Ser | Thr |
|     |     |     |     | 65  |     |     |     |     | 70  |     |     |     |     | 75  |
| Phe | Leu | Pro | Val | Tyr | Met | His | Ile | Arg | Val | Leu | Val | Ala | Ala | Tyr |
|     |     |     |     | 80  |     |     |     |     | 85  |     |     |     |     | 90  |
| Leu | Phe | Gln | Thr | Gly | Tyr | Gly | His | Phe | Ser | Tyr | Phe | Trp | Ile | Lys |
|     |     |     |     | 95  |     |     |     |     | 100 |     |     |     |     | 105 |
| Gly | Asp | Phe | Gly | Ile | Tyr | Arg | Val | Cys | Gln | Val | Leu | Phe | Arg | Leu |
|     |     |     |     | 110 |     |     |     |     | 115 |     |     |     |     | 120 |
| Asn | Phe | Leu | Val | Val | Val | Leu | Cys | Ile | Val | Met | Asp | Arg | Pro | Tyr |
|     |     |     |     | 125 |     |     |     |     | 130 |     |     |     |     | 135 |
| Gln | Phe | Tyr | Tyr | Phe | Val | Pro | Leu | Val | Thr | Val | Trp | Phe | Met | Val |
|     |     |     |     | 140 |     |     |     |     | 145 |     |     |     |     | 150 |
| Ile | Tyr | Val | Thr | Leu | Ala | Leu | Trp | Pro | Gln | Ile | Ile | Gln | Lys | Lys |
|     |     |     |     | 155 |     |     |     |     | 160 |     |     |     |     | 165 |
| Ala | Asn | Gly | Asn | Cys | Phe | Trp | His | Phe | Gly | Leu | Leu | Leu | Lys | Leu |
|     |     |     |     | 170 |     |     |     |     | 175 |     |     |     |     | 180 |
| Gly | Phe | Leu | Leu | Leu | Phe | Ile | Cys | Phe | Leu | Ala | Tyr | Ser | Gln | Gly |
|     |     |     |     | 185 |     |     |     |     | 190 |     |     |     |     | 195 |
| Ala | Phe | Glu | Lys | Ile | Phe | Ser | Leu | Trp | Pro | Leu | Ser | Lys | Cys | Phe |
|     |     |     |     | 200 |     |     |     |     | 205 |     |     |     |     | 210 |
| Glu | Leu | Lys | Gly | Asn | Val | Tyr | Glu | Trp | Trp | Phe | Arg | Trp | Arg | Leu |
|     |     |     |     | 215 |     |     |     |     | 220 |     |     |     |     | 225 |
| Asp | Arg | Tyr | Val | Val | Phe | His | Gly | Met | Leu | Phe | Ala | Phe | Ile | Tyr |
|     |     |     |     | 230 |     |     |     |     | 235 |     |     |     |     | 240 |
| Leu | Ala | Leu | Gln | Lys | Arg | Gln | Ile | Leu | Ser | Glu | Gly | Lys | Gly | Glu |
|     |     |     |     | 245 |     |     |     |     | 250 |     |     |     |     | 255 |
| Pro | Leu | Phe | Ser | Asn | Lys | Ile | Ser | Asn | Phe | Leu | Leu | Val | Ile | Ser |
|     |     |     |     | 260 |     |     |     |     | 265 |     |     |     |     | 270 |
| Val | Val | Ser | Phe | Leu | Gly | Lys | Phe |     |     |     |     |     |     |     |
|     |     |     |     | 275 |     |     |     |     |     |     |     |     |     |     |

&lt;210&gt; 28

&lt;211&gt; 320

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; misc\_feature

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PF-0681 PCT

&lt;223&gt; Incyte ID No: 4901066CD1

&lt;400&gt; 28

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Met | Thr | Leu | Trp | Asn | Gly | Val | Leu | Pro | Phe | Tyr | Pro | Gln | Pro | Arg | 1   | 5   | 10  | 15  |
| His | Ala | Ala | Gly | Phe | Ser | Val | Pro | Leu | Leu | Ile | Val | Ile | Leu | Val | 20  | 25  | 30  | 35  |
| Phe | Leu | Ala | Leu | Ala | Ala | Ser | Phe | Leu | Leu | Ile | Leu | Pro | Gly | Ile | 40  | 45  | 50  | 55  |
| Arg | Gly | His | Ser | Arg | Trp | Phe | Trp | Leu | Val | Arg | Val | Leu | Leu | Ser | 60  | 65  | 70  | 75  |
| Leu | Phe | Ile | Gly | Ala | Glu | Ile | Val | Ala | Val | His | Phe | Ser | Ala | Glu | 80  | 85  | 90  | 95  |
| Trp | Phe | Val | Gly | Thr | Val | Asn | Thr | Asn | Thr | Ser | Tyr | Lys | Ala | Phe | 100 | 105 | 110 | 115 |
| Ser | Ala | Ala | Arg | Val | Thr | Ala | Arg | Val | Gly | Leu | Leu | Val | Gly | Leu | 120 | 125 | 130 | 135 |
| Glu | Gly | Ile | Asn | Ile | Thr | Leu | Thr | Gly | Thr | Pro | Val | His | Gln | Leu | 140 | 145 | 150 | 155 |
| Asn | Glu | Thr | Ile | Asp | Tyr | Asn | Glu | Gln | Phe | Thr | Trp | Arg | Leu | Lys | 160 | 165 | 170 | 175 |
| Glu | Asn | Tyr | Ala | Ala | Glu | Tyr | Ala | Asn | Ala | Leu | Glu | Lys | Gly | Leu | 180 | 185 | 190 | 195 |
| Pro | Asp | Pro | Val | Leu | Tyr | Leu | Ala | Glu | Lys | Phe | Thr | Pro | Ser | Ser | 200 | 205 | 210 | 215 |
| Pro | Cys | Gly | Leu | Tyr | His | Gln | Tyr | His | Leu | Ala | Gly | His | Tyr | Ala | 220 | 225 | 230 | 235 |
| Ser | Ala | Thr | Leu | Trp | Val | Ala | Phe | Cys | Phe | Trp | Leu | Leu | Ser | Asn | 240 | 245 | 250 | 255 |
| Val | Leu | Leu | Ser | Thr | Pro | Ala | Pro | Leu | Tyr | Gly | Gly | Leu | Ala | Leu | 260 | 265 | 270 | 275 |
| Leu | Thr | Thr | Gly | Ala | Phe | Ala | Leu | Phe | Gly | Val | Phe | Ala | Leu | Ala | 280 | 285 | 290 | 295 |
| Ser | Ile | Ser | Ser | Val | Pro | Leu | Cys | Pro | Leu | Arg | Leu | Gly | Ser | Ser | 300 | 305 | 310 | 315 |
| Ala | Leu | Thr | Thr | Gln | Tyr | Gly | Ala | Ala | Phe | Trp | Val | Thr | Leu | Ala | 320 |     |     |     |
| Thr | Gly | Val | Leu | Cys | Leu | Phe | Leu | Gly | Gly | Ala | Val | Val | Ser | Leu |     |     |     |     |
| Gln | Tyr | Val | Arg | Pro | Ser | Ala | Leu | Arg | Thr | Leu | Leu | Asp | Gln | Ser |     |     |     |     |
| Ala | Lys | Asp | Cys | Ser | Gln | Glu | Arg | Gly | Gly | Ser | Pro | Leu | Ile | Leu |     |     |     |     |
| Gly | Asp | Pro | Leu | His | Lys | Gln | Ala | Ala | Leu | Pro | Asp | Leu | Lys | Cys |     |     |     |     |
| Ile | Thr | Thr | Asn | Leu |     |     |     |     |     |     |     |     |     |     |     |     |     |     |

&lt;210&gt; 29

&lt;211&gt; 360

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; misc\_feature

&lt;223&gt; Incyte ID No: 5031174CD1

&lt;400&gt; 29

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |    |    |    |    |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|----|----|----|
| Met | Ser | Gln | Gly | Arg | Gly | Lys | Tyr | Asp | Phe | Tyr | Ile | Gly | Leu | Gly | 1  | 5  | 10 | 15 |
| Leu | Ala | Met | Ser | Ser | Ser | Ile | Phe | Ile | Gly | Gly | Ser | Phe | Ile | Leu | 20 | 25 | 30 |    |



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|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Lys | Lys | Lys | Gly | Leu | Leu | Arg | Leu | Ala | Arg | Lys | Gly | Ser | Met | Arg | 35  | 40  | 45  |
| Ala | Gly | Gln | Gly | Gly | His | Ala | Tyr | Leu | Lys | Glu | Trp | Leu | Trp | Trp | 50  | 55  | 60  |
| Ala | Gly | Leu | Leu | Ser | Met | Gly | Ala | Gly | Glu | Val | Ala | Asn | Phe | Ala | 65  | 70  | 75  |
| Ala | Tyr | Ala | Phe | Ala | Pro | Ala | Thr | Leu | Val | Thr | Pro | Leu | Gly | Ala | 80  | 85  | 90  |
| Leu | Ser | Val | Leu | Val | Ser | Ala | Ile | Leu | Ser | Ser | Tyr | Phe | Leu | Asn | 95  | 100 | 105 |
| Glu | Arg | Leu | Asn | Leu | His | Gly | Lys | Ile | Gly | Cys | Leu | Leu | Ser | Ile | 110 | 115 | 120 |
| Leu | Gly | Ser | Thr | Val | Met | Val | Ile | His | Ala | Pro | Lys | Glu | Glu | Glu | 125 | 130 | 135 |
| Ile | Glu | Thr | Leu | Asn | Glu | Met | Ser | His | Lys | Leu | Gly | Asp | Pro | Gly | 140 | 145 | 150 |
| Phe | Val | Val | Phe | Ala | Thr | Leu | Val | Val | Ile | Val | Ala | Leu | Ile | Leu | 155 | 160 | 165 |
| Ile | Phe | Val | Val | Gly | Pro | Arg | His | Gly | Gln | Thr | Asn | Ile | Leu | Val | 170 | 175 | 180 |
| Tyr | Ile | Thr | Ile | Cys | Ser | Val | Ile | Gly | Ala | Phe | Ser | Val | Ser | Cys | 185 | 190 | 195 |
| Val | Lys | Gly | Leu | Gly | Ile | Ala | Ile | Lys | Glu | Leu | Phe | Ala | Gly | Lys | 200 | 205 | 210 |
| Pro | Val | Leu | Arg | His | Pro | Leu | Ala | Trp | Ile | Leu | Leu | Leu | Ser | Leu | 215 | 220 | 225 |
| Ile | Val | Cys | Val | Ser | Thr | Gln | Ile | Asn | Tyr | Leu | Asn | Arg | Ala | Leu | 230 | 235 | 240 |
| Asp | Ile | Phe | Asn | Thr | Ser | Ile | Val | Thr | Pro | Ile | Tyr | Tyr | Val | Phe | 245 | 250 | 255 |
| Phe | Thr | Thr | Ser | Val | Leu | Thr | Cys | Ser | Ala | Ile | Leu | Phe | Lys | Glu | 260 | 265 | 270 |
| Trp | Gln | Asp | Met | Pro | Val | Asp | Asp | Val | Ile | Gly | Thr | Leu | Ser | Gly | 275 | 280 | 285 |
| Phe | Phe | Thr | Ile | Ile | Val | Gly | Ile | Phe | Leu | Leu | His | Ala | Phe | Lys | 290 | 295 | 300 |
| Asp | Val | Ser | Phe | Ser | Leu | Ala | Ser | Leu | Pro | Val | Ser | Phe | Arg | Lys | 305 | 310 | 315 |
| Asp | Glu | Lys | Ala | Met | Asn | Gly | Asn | Leu | Ser | Asn | Met | Tyr | Glu | Val | 320 | 325 | 330 |
| Leu | Asn | Asn | Asn | Glu | Glu | Ser | Leu | Thr | Cys | Gly | Ile | Glu | Gln | His | 335 | 340 | 345 |
| Thr | Gly | Glu | Asn | Val | Ser | Arg | Arg | Asn | Gly | Asn | Leu | Thr | Ala | Phe | 350 | 355 | 360 |

&lt;210&gt; 30

&lt;211&gt; 1716

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; misc\_feature

&lt;223&gt; Incyte ID No: 1316927CB1

&lt;400&gt; 30

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&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

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&lt;221&gt; unsure

&lt;222&gt; 1094

&lt;223&gt; a or g or c or t, unknown, or other

&lt;220&gt;

&lt;221&gt; misc\_feature

&lt;223&gt; Incyte ID No: 1354891CB1

&lt;400&gt; 31

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&lt;210&gt; 32

&lt;211&gt; 3324

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PF-0681 PCT

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&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; misc\_feature

&lt;223&gt; Incyte ID No: 1415487CB1

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| cttgtagcct  | aggagcagtc  | gactctagcg  | tccatcctgg  | gtgtgtattg  | ggctgtacca  | 180  |
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| tgtttcttca  | gcatatgact  | agaacattcc  | atgacttgga  | aggaaatgca  | gttaaaccggg | 720  |
| actctggaat  | atggatcaat  | gggtttgatt  | atactggaat  | ttctcacata  | acccctcaca  | 780  |
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| ggatagaagt  | gcaggtttca  | gaagaacatc  | ctgaaggaa   | ggtcaccgtg  | gccattgctg  | 1200 |
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PF-0681 PCT

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&lt;220&gt;

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&lt;223&gt; Incyte ID No: 2057214CB1

&lt;400&gt; 36

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PF-0681 PCT

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&lt;220&gt;

&lt;221&gt; misc\_feature

&lt;223&gt; Incyte ID No: 2448177CB1

&lt;400&gt; 37

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&lt;223&gt; Incyte ID No: 2741701CB1

&lt;400&gt; 38

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WO 00/56891

PCT/US00/07817

PF-0681 PCT

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&lt;223&gt; Incyte ID No: 3487228CB1

&lt;400&gt; 39

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PCT/US00/07817

PF-0681 PCT

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967

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&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; misc\_feature

&lt;223&gt; Incyte ID No: 3671426CB1

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&lt;211&gt; 2001

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&lt;400&gt; 41

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PF-0681 PCT

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&lt;400&gt; 42

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&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; misc\_feature

&lt;223&gt; Incyte ID No: 483751CB1

&lt;400&gt; 45

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&lt;223&gt; Incyte ID No: 727332CB1

&lt;400&gt; 46

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&lt;223&gt; Incyte ID No: 778800CB1

&lt;400&gt; 47

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&lt;210&gt; 48

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&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;220&gt;

WO 00/56891

PCT/US00/07817

PF-0681 PCT

&lt;221&gt; misc\_feature

&lt;223&gt; Incyte ID No: 1396995CB1

&lt;400&gt; 48

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&lt;211&gt; 800

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&lt;213&gt; Homo sapiens

&lt;220&gt;

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&lt;400&gt; 49

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&lt;213&gt; Homo sapiens

&lt;220&gt;

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PF-0681 PCT

&lt;400&gt; 50

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&lt;210&gt; 51

&lt;211&gt; 2744

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; misc\_feature

&lt;223&gt; Incyte ID No: 1989585CB1

&lt;400&gt; 51

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&lt;210&gt; 52

&lt;211&gt; 1679

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; misc\_feature

&lt;223&gt; Incyte ID No: 2134729CB1

&lt;400&gt; 52

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&lt;211&gt; 1625

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&lt;400&gt; 53

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&lt;210&gt; 54

&lt;211&gt; 1212

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;220&gt;

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&lt;223&gt; Incyte ID No: 2506558CB1

&lt;400&gt; 54

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&lt;211&gt; 1465

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; misc\_feature

&lt;223&gt; Incyte ID No: 2546025CB1

&lt;400&gt; 55

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&lt;220&gt;

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&lt;400&gt; 56

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WO 00/56891

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&lt;213&gt; Homo sapiens

&lt;220&gt;

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&lt;223&gt; Incyte ID No: 4901066CB1

&lt;400&gt; 57

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&lt;211&gt; 2310

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&lt;220&gt;

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&lt;223&gt; Incyte ID No: 5031174CB1

WO 00/56891

PCT/US00/07817

PF-0681 PCT

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